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ABSTRACT

This document is comprised of volume 12 of the Harvard Education Letter, published bimonthly and addressing current issues in elementary-secondary education. Articles in this volume include the following: (1) January-February--"Early Reports From Kentucky on Cash Rewards for 'Successful' Schools Reveal Many Problems" (Miller), "New Ideas Like Collective Incentives and Skill-Based Pay Raise the Same Old Questions" (Sadowski, Miller); "Recognizing Signs of Stress Is the First Step in Keeping Kids from Living in the Streets" (Posner), (2) March-April--"Whole Language or Phonics? Teachers and Researchers Find the Middle Ground Most Fertile" (Matson), "The Case of Invented Spelling: How Theory Becomes Target Practice" (Miller), "Creating Family Stories Leads Students to a Richer Understanding of U.S. History" (Gow, Davino); (3) May-June--"Perception Versus Reality: School Uniforms and the 'Halo Effect'" (Posner), "Five Reasons Students Plagiarize, and What Teachers Can Do about It" (Tarlin), "Kidding Ourselves about School Dropout Rates" (Fossey), "'But Indians Aren't Real': What Young Children Learn about Native Americans" (Reese); (4) July-August--"Idealists and Cynics: The Micropolitics of Systemic School Reform" (Miller), "Hard-Won Lessons from the School Reform Battle: A Conversation with Ted Sizer," "The Disheartening Work of School Reform" (Sizer); (5) September-October--"Mathematics and Science Standards: What Do They Offer the Middle Grades?" (Wheelock), "Urban Middle-Grades Reform: Foundations Keep Trying" (Lewis); "Goals 2000: Pork or Progress?" (Lewis); and (6) November-December--"Just Like Starting Over: The Promises and Pitfalls of Block Scheduling" (Sadowski), "Getting Kids into the Picture: Student

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Drawings Help Teachers See Themselves More Clearly" (Tovey), "What's So Bad about the Lecture?" (Birk). Regular features include letters to the editor and summaries of recent educational research. (KB)

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The Harvard Education Letter

Volume XII, Number 1 *Published by the Harvard Graduate School of Education* January/February 1996

INCENTIVES AND ACCOUNTABILITY

Early Reports from Kentucky on Cash Rewards For 'Successful' Schools Reveal Many Problems

A closely watched experiment in collective incentives sheds light on how hard it is to design a fair and workable system of rewards based on student achievement

BY EDWARD MILLER

When the Kentucky Supreme Court ruled in 1989 that the state's system of funding public schools was unconstitutionally inadequate and inequitable, the legislature reacted by passing the comprehensive Kentucky Education Reform Act (KERA) of 1990. It established a statewide system of rewards and sanctions to guarantee that schools "shall expect a high level of achievement from all students" and would be held accountable for students' performance.

To avoid the well-documented flaws of individual incentives like merit pay (see page 3), the Kentucky rewards were designed as collective incentives. The first round of these rewards—$26.1 million in all—went to schools and districts in 1995.

INSIDE

Can Rewards Work? Why Merit Pay Failed

Street Kids: Helping Homeless and Runaway Youth

Early reports from researchers raise troubling questions about the use of cash payments in this way to improve schools. They found no evidence that the rewards actually functioned as incentives; indeed, in some cases controversy over use of the money appears to have torn schools apart. The evidence also suggests that, in schools that weren't rewarded, the goals of the statewide reform effort may have been undermined, not reinforced.

Hard Feelings

The use of the money—which ranged from $1,300 to $2,600 per teacher—was deliberately left open-ended in Kentucky. The state legislature specified only that the certified staff of each school would decide how to spend it. Surveys conducted by the state education department found that, in almost every one of the 480 winning schools, the staff chose to give themselves bonuses. More than half of the schools reported that the division of funds had created serious problems.

"The rewards have driven wedges between teachers, parents, and schools," says Pam Coe, principal investigator of a KERA implementation study at the Appalachia Educational Laboratory in Charleston, West Virginia. "There were arguments about who should get the money. Should nonteaching staff like secretaries and cafeteria workers get a share? It also created bad feelings among parents, who thought the kids had earned the money, not the teachers."

> ***"The rewards have driven wedges between teachers, parents, and schools," says Coe.***

"In some communities where teachers kept the money as bonuses, parents were mad because the schools had obvious needs," says Robert Sexton, director of the Prichard Committee for Academic Excellence, a citizens advocacy organization in Lexington, Kentucky.

"It became real ugly," said the principal of one elementary school in a study done by Charles Abelmann for the Consortium for Policy Research in Education at Harvard. "Feelings were hurt. Lots of animosity developed." A teacher in this same school said, "It was the

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worst experience of my life in a school system."

"Anytime you give people the power to put money in their own pockets," observed the principal of another school in Abelmann's study, "you create the potential for hard feelings."

No Confidence in Tests

The reports from Kentucky also point up problems in using student test results to hold schools accountable. Coe says "a major uproar" erupted over the reliability and validity of the assessments that determined which schools had exceeded the performance standards established by KERA.

To avoid the pitfalls of tying the rewards to students' scores on multiple-choice tests, the legislature purposely pegged the system to more "authentic" assessments, designed to focus on what students should know and be able to do. These included performances, portfolios, and open-ended test questions requiring students to demonstrate their knowledge in writing. One component of each school's performance index rated "noncognitive" factors such as attendance, retention, and dropout rates, and, for high schools, a measure of graduates' transition to adult life.

"The biggest problem with the whole program is that principals and teachers do not have confidence in the tests," says Roger Pankratz, executive director of the Kentucky Institute for Education Research (KIER). The emphasis on writing to measure student learning across the disciplines struck many teachers as unfair. In a July 1995 KIER survey, 75 percent of the teachers said that the heavy emphasis on communication and thinking processes "shortchanges students on content they need to be successful in life."

The treatment of special education students and the use of portfolios also raised fairness issues. The reform law specified that all children would be tested, including those with disabilities. "The companies that designed the tests never dealt with this issue," says Pankratz. "It was decided that the special ed children would be given extra help. But there was a lot of variance in how much help kids got. A lot of people think teachers are helping more than they should be."

Similarly, teachers' involvement in helping students assemble portfolios provoked widespread accusations of cheating. "There were no standards for the amount of time teachers should spend working with kids on portfolios," points out Pam Coe. "What some considered appropriate was viewed by others as cheating." The result, she says, was that many teachers and parents doubted that schools had earned their rewards legitimately.

The emphasis on writing to measure student learning across the disciplines struck many teachers as unfair.

Moreover, teachers felt they were being held accountable before they had had a chance to change their classroom practice. "Most schools were not oriented to the new assessments," says Coe. "I found one school where the teachers didn't complain—where they did everything the literature says, working together in teams to adjust the curriculum to the new standards. They had already been working in that direction, and they wanted to do it. But that was one school—out of 21 that we studied."

The state education department, reacting to complaints about the new assessments, now plans to switch to multiple-choice tests to give the system more validity. It's not clear, however, how the results of these tests can be accurately compared with the results of the alternative assessments to determine the next scheduled round of rewards. "The department has reworked the benchmarks," says Pankratz. "They think one round of testing will be enough to establish validity. I don't think so."

Extreme Stress Levels

Only students in grades 4, 8, and 12 were tested, raising another validity issue. Elementary schools, for example, were rewarded for improvement between one group of fourth graders and a different group, tested in a subsequent year. "The system does not hold schools responsible for individual student growth over time," Charles Abelmann notes. "This raises questions about what in fact is being rewarded."

Most of the Kentucky educators surveyed in these studies were hard-pressed to answer Abelmann's question. "Even in schools that got rewards," says Pam Coe, "people didn't have a good idea of what had accounted for them. Some attributed the results to the school, others to the students' parents or home environment. And they didn't have a strong sense of what to do to keep getting the rewards in the future."

Some evidence suggests that the rewards may have undermined teachers' sense of efficacy, which many researchers believe is strongly related to student achievement. Peter Winograd and colleagues at the University of Kentucky compared the attitudes of teachers in rewarded schools with those of teachers in schools where the performance index showed improvement but had not risen high enough to qualify for the cash. The "nonreward" teachers, they found, were significantly more likely to feel unqualified to deal with the emotional and behavioral problems of students and to agree with the statement, "Some students are not going to make a lot of progress no matter what I do."

In schools that did not receive rewards, the KIER survey found significantly less support for the KERA program among teachers and administrators, heightened skepticism about the validity and reliability of the assessments, and widespread agreement that the "personal stress level" of teachers and principals was "extreme."

Some of this stress no doubt related to the original KERA accountability plan, which called not just for rewards for improved schools but also for sanctions against schools that performed poorly. Schools whose scores went down would be labeled either "in decline" or "in crisis," would have to cre-

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ate improvement plans, and would get special assistance from the state. The staffs of schools "in crisis" would be placed on probation, subject to immediate dismissal, and parents would be given the option of transferring their children to other schools.

"There was almost unanimous agreement in the schools we studied that teachers were motivated to change not by the rewards but by the fear of sanctions," says Coe. "The motivation was negative, not positive. Teachers said their sense of professionalism was degraded both by the rewards and threat of punishment and by the pressure to teach strictly to the tests, which undermined their professional judgment."

Political Pressures

In the end, the state put the most severe sanctions on hold because of doubts about the validity and reliability of the assessments. Researchers disagree about prospects for tinkering with the system to make it work. Charles Abelmann is cautiously optimistic. "The system has worked to encourage teachers to change what they're doing," he says. Abelmann thinks that the assessments can be refined and that incentives should be used to pay for school improvements, not as cash rewards for teachers.

Roger Pankratz questions the entire accountability model at the heart of KERA's incentive plan. "An accountability system is a powerful tool for changing schools," he agrees. "But I think all you would need to do is publish the results of the tests in the paper. You don't need the rewards and the sanctions." He is discouraged, he says, about prospects for developing "a worthy test that will drive instruction in the right direction."

Pankratz predicts that the incentive system will survive. "The public wants accountability," he says. "There's an awful lot of political pressure, especially from the business community. They claim that rewards and sanctions do work."

The KIER survey reveals a large gap between educators' views and public opinion on the role of incentives. Three-fourths of the parents polled agreed that "both rewards and sanctions are essential to hold teachers and schools accountable for student learning." Only 20 percent of teachers and 22 percent of principals agreed with the statement. In the University of Kentucky survey, 91 percent of the "nonreward" teachers and 81 percent of the rewarded teachers disagreed with the statement, "The existence of rewards makes me more interested in being a good teacher." Large majorities of both teachers and principals in the KIER survey agreed that Kentucky's system of rewards and sanctions "has taken the fun out of teaching and learning."

For Further Information

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DO REWARDS WORK?

New Ideas Like Collective Incentives and Skill-Based Pay Raise the Same Old Questions

Individual merit pay for teachers usually backfires, researchers agree, but policymakers still search for ways to link pay to performance

BY MICHAEL SADOWSKI AND EDWARD MILLER

Incentive-based systems for paying teachers became a hot topic in the 1980s after the publication of *A Nation at Risk*, which decried the allegedly declining achievement of U.S. schoolchildren. The popularity of incentives among state legislatures and local school boards was fueled by a widely held belief in their logic and simplicity as a tool for improving education: to many policymakers, it seems obvious that money motivates people and that paying all the teachers in a system on a single salary scale, without regard to performance, makes no sense.

Meanwhile, in the research community, there has been almost unanimous agreement that individual teacher incentives—the most common being merit pay—rarely work as they are intended to, for a variety of complex reasons. Now financial incentives to improve schools are again in the news. The states of Kentucky, South Carolina, and Oklahoma and school districts in Dallas, Baltimore, Boston, Denver, and Douglas County, Colorado, have all recently adopted or considered adopting them. Some plans are new versions of the old merit pay idea; others attempt to avoid the pitfalls of individual incentives by rewarding teachers collectively when their schools achieve specified goals.

Rewarding teachers with extra pay for doing a "better" job is an old idea. Merit pay plans were first popular early in this century, when more than a third of the country's school districts tried them. With few exceptions, these plans failed and were abandoned. The reasons: there was no agreement on what constitutes good teaching; there were no reliable measures of teaching efficiency; and merit pay schemes undermined teachers' morale.

The use of merit pay fell to just 4 percent of school districts after World War II, only to re-emerge in the late 1950s in what David Cohen of the University of Michigan and Richard Mur-

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nane of Harvard called "a rush of amnesiac enthusiasm." This second wave was set in motion by the Sputnik launch in 1957, which ignited concerns about what U.S. students were not learning. Again, most of these efforts were short-lived, in part because of the extreme difficulty of evaluating teachers' performance fairly.

"Merit pay based on supervisors' evaluations of the performance of individual teachers simply does not work," says Murnane flatly. "There is perhaps no educational reform idea that has been tried so often and in so many settings. In the vast majority of cases where districts have adopted merit pay plans for individual teachers, they have dropped them within five years."

Why Merit Pay Failed

Susan Moore Johnson of the Harvard Graduate School of Education explains that the difficulty of pinning down the specific qualities of good teaching leads to an inherent contradiction in the idea of merit pay. Rewards, research shows, are effective only when they are tied to focused goals, so rewarding good teachers means specifying limited performance criteria. But this leads teachers to respond selectively to these standards and to disregard others. "It appears inevitable," writes Johnson, "that the full range of the goals of schooling cannot receive evenhanded attention under merit pay plans."

Some districts tried to get around the evaluation problem by basing merit awards on students' test scores. Ronald A. Berk of Johns Hopkins University analyzed the statistical and design issues of this solution and concluded that "it would be exceedingly difficult, if not impossible, to logically, theoretically, or empirically justify the practice as fair and equitable for all teachers." He found the use of test scores for this purpose "indefensible."

Moreover, years of research call into question the assumption that money is an effective incentive for teachers. "There is extensive evidence that teachers regard professional efficacy, not money, as the primary motivator in their work," writes Johnson, "and some evidence that the prospect of extrinsic rewards may diminish the potency of intrinsic rewards for them."

Cohen and Murnane, who studied six districts where merit pay plans survived, asked teachers what motivated them to do good work. "Their answers," they wrote, "were all consistent with what one woman in Virginia Beach told us: 'Every once in a while the light bulb goes on in a kid's head.'" The researchers concluded that, even in these six districts where merit pay was relatively popular, "there is no evidence that the money had an appreciable or consistent positive effect on teachers' classroom work."

Merit pay can subvert the organizational goals of schools, argues Allen Odden of the University of Wisconsin. "Individual merit pay works for very, very few organizations across the public or private sectors today because most now emphasize teamwork," he says. "By forcing teachers to compete for scarce organizational rewards, merit pay systems undermine the collegial and interconnected nature of the effective educational organization."

Texas teachers already spend a third of their class time preparing students for the Texas Assessment of Academic Skills.

Student performance was not considered in determining who got merit awards in any of the six districts Cohen and Murnane studied. They found that merit pay had survived in these districts because teachers collaborated in defining the criteria for merit, because the plans kept a "low profile" (participation was voluntary; winners and losers were not fussed over), and because bad feelings were minimized by keeping the awards small or giving them to almost everyone. They further concluded that merit pay survived mainly in communities that "are economically and socially advantaged, have decent salary schedules, and enjoy good labor-management relations." They found no examples of merit pay that worked in "districts that enrolled mostly disadvantaged students, had poor quality schools, or had fractious labor-management relations."

Collective Incentives

Should we forget performance-based pay altogether, or look for ways to make it work? Some scholars, including Murnane, Johnson, Odden, and Sharon Conley of the University of Maryland, caution against dismissing the idea of incentives entirely. They say the problem is not the idea of incentive pay, but the forms it takes and whether they are appropriate to the settings and workers involved.

Some state and local policymakers have tried to adapt incentives to the collegial nature of good schools by rewarding groups of teachers, not individuals. William Firestone of Rutgers University explains the rationale: "Collective pay plans can encourage teachers to work together by providing them with common goals that can only be realized through common effort. Because their fate is shared, the competitiveness and divisiveness of individual incentive plans is avoided." Teachers have been enthusiastic about these programs, Firestone reports, especially when they are invited to collaborate in designing them.

There is as yet little evidence on the effectiveness of collective incentives, but early reports from one of the most closely watched statewide experiments, in Kentucky, reveal a variety of problems (see page 1). Kentucky allowed its awards to be divided up by school staffs as bonuses, at their own discretion. This process appears to have created as much ill will as any of the old merit pay plans. The evidence also calls into question the presumed effect of the incentives on schools that didn't get the money; teachers in these schools report a lowered sense of efficacy, higher stress levels, and less commitment to the goals of school reform.

Another collective incentive plan, in South Carolina, gives about one-fourth of the state's schools bonuses for meeting student improvement goals as measured by test scores and for maintaining high student and teacher attendance levels. Established in 1984 by then-governor Richard W. Riley (now U.S. Secretary of Education), the South Carolina program provides additional funds to schools for instructional use only. Unlike the Kentucky plan, it does not allow for bonuses paid directly to teachers. There is no evidence on the long-term effects of this program, according to Firestone.

An incentive system in the Dallas Public Schools, put in place in 1992, is based on gains in students' performance on standardized tests. The Dallas program provides bonuses for principals, teachers, and all other staff. Top awards for professional staff in eligible schools are $1,000; nonprofessional staff receive $500; and the schools' activity accounts get $2,000. Principals and area superintendents of the lowest-ranked schools have been called before the school board and reassigned.

Scores on the Iowa Tests of Basic Skills have risen over the last five years in Dallas; Superintendent Chad Woolery and most members of the school board attribute the improvement to the new incentive system. But some educators question the system's emphasis on standardized tests. The Texas affiliate of the National Education Association reported last year that the state's teachers already spend a third of their class time preparing students for the Texas Assessment of Academic Skills, which is used to rank schools in a statewide accountability plan. The new Dallas program, critics argue, can only add to the skewing of the curriculum that inevitably occurs when multiple-choice test scores are used to rank and reward teachers and schools.

The Kentucky plan tried to avoid the problems of relying on standardized tests by basing rewards on performance assessments and portfolios. This led to a new set of problems, including widespread accusations of cheating and general skepticism about the validity of the results. Kentucky now plans to go back to multiple-choice tests.

It is unclear whether these programs have had any appreciable effect on student learning. Susan Moore Johnson, whose research has focused on the teacher's workplace, sees some of the same problems with group incentives as with individual merit pay. "School-based plans are more consistent with the philosophy of schools as collaborative enterprises," she says. "But just as individual merit pay sets up competition among teachers that may discourage collaboration, school-based rewards set up districtwide competition, pitting one school against another for a fixed pot of resources. Strong schools will get stronger and weak schools will get weaker."

Those who favor a free-market model of school reform, of course, call for just this kind of competition. "The question is not whether teachers like competition, but how they respond to competition," says Richard Murnane. "The problem with merit pay for individual teachers is that their responses to it are dysfunctional—they make schools work less well. It is not yet known how teachers respond to group-level pay plans."

But Johnson notes that any kind of financial incentive will always be of secondary importance in a profession where the greatest rewards are nonmonetary. "I wonder whether any kind of financial incentives could change teaching in ways that truly affect student achievement," she says. "The underlying idea behind them is that teachers aren't doing what they could, and that somehow the money would spur them to do better. School improvement is much more complicated than that."

Skill-Based Pay

Borrowing a concept from employee motivation theorist Edward Lawler, Sharon Conley and Allen Odden recommend "skill- and knowledge-based" pay systems for schools as a possible remedy to the complex problem of evaluating teachers' performance fairly. Such systems, largely untried in schools, have had considerable success in the public and private sectors, the researchers claim.

Teachers would be compensated not on the basis of supervisor evaluations or students' test scores, but for additional knowledge and skills acquired while on the job, through college courses or professional development activities directly related to their areas of instruction. This kind of system, Conley and Odden argue, is more consistent with teachers' true motivations. If a teacher's primary objective is to help students learn, a pay system that encourages her to acquire more knowledge and skills (and presumably become a better teacher) could work on both the intrinsic and extrinsic levels.

The standard salary schedule, currently in place in most schools, is, of course, a form of skill- and knowledge-based pay based on indirect indicators: teachers' years of experience and level of education. Conley and Odden argue that a better model would place more emphasis on factors directly related to teachers' work.

The key question, however, is what these factors are and how they are to be measured. "If skills are to be measured only by whether the teachers have taken the workshops or courses," Murnane points out, "this is not very different from what we have now. If skills are measured by what teachers actually do, as is the case with the National Board for Professional Teaching Standards, this is much more interesting. How skills will be assessed is the critical issue."

The Pocatello, Idaho, school system is one of the few that have tried such an approach. The district offers a "career compensation plan," whereby teachers can receive training grants of up to $1,000 for workshops, research, college courses, and other professional development activities. Tied to the learning component is a voluntary career ladder pay structure. Teachers who demonstrate greater expertise through portfolios, conferences, and observations are able to advance and earn salary increases.

But aspects of the Pocatello plan sound a lot like the old merit pay idea, and raise some of the same old questions: Who judges the quality of the portfolios? Who makes the observations? What are the criteria for judging teachers' expertise? Will teachers ultimately come to trust or distrust the fairness of the system?

Conley and Odden are vague in addressing these questions, and their arguments for skill- and knowledge-based pay also sidestep the fundamental problem that Cohen and Murnane described in their analysis of merit pay: "Making distinctions between very good and merely good teachers was counterproductive, for it created resentment and alienation rather than encouraging the good teachers to do even better."

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New and Noteworthy

Brief notes on significant recent research in education

CLASS SIZE

Smaller Classes in Primary Grades Produce Lasting Benefits

"The effects of class size on children's learning have been much studied," writes Frederick Mosteller in an important new analysis, "usually without definitive conclusions." Mosteller, Harvard Professor of Mathematical Statistics, Emeritus, and a renowned authority on research design, examined nine years of data from Tennessee's Project STAR (Student/Teacher Achievement Ratio) and concluded that small class sizes in kindergarten, first, second, and third grades "speeds learning in these years and confers lasting benefits into later grades." He calls Project STAR "one of the great experiments in education in United States history."

Mosteller attaches special importance to the Tennessee study because of its unusually large size and the care with which it was designed and carried out. Classes in urban, suburban, and rural schools were included. The performance of students was measured by both standardized and curriculum-oriented tests in reading and math. Students in smaller classes (average size 15) outperformed students in regular-size classes (average size 22 or 23) in every category.

The study also measured the effects of having a teacher's aide in regular-size classes. The presence of aides, Mosteller reports, was positive but did not produce improvements comparable to the effects of smaller classes.

Mosteller draws special attention to the study's findings on nonwhite children. "The effect sizes for the minorities," he writes, "were just about double those for whites, averaged over the four tests. Because minority students have higher dropout risks than majority students, such news of improvement is especially welcome."

See F. Mosteller. "The Tennessee Study of Class Size in the Early School Grades." *The Future of Children* 5, no. 2 (Summer/Fall 1995): 113-127. (D. and L. Packard Foundation, 300 Second St., Suite 102, Los Altos, CA 94022; 415-948-3696.)

ASSESSMENT

Parents Prefer Alternatives to Standardized Tests in One Study

Most parents in a recent study said they preferred performance-based methods of assessment—including talking to teachers about their children's progress—to standardized tests and other traditional forms of assessment.

Lorrie A. Shepard and Carribeth L. Bliem of the University of Colorado worked with parents of early elementary school students in six schools in a lower- and middle-income district. The 105 parents they surveyed said they found conversations with teachers, graded samples of their children's work, and report cards to be more helpful in gauging their children's academic progress than standardized tests. The parents favored combining performance-based methods with standardized testing for district-level accountability. But for instructional uses in the classroom, nearly all parents preferred performance assessments.

The researchers were surprised at the findings, and speculate that the parents felt more comfortable with the sometimes controversial alternative approaches when they saw concrete examples of test questions and were reassured that the traditional tests would not be completely abandoned. They argue that, given a fair chance to compare methods, parents will react positively to new assessment practices, which will in turn help find "common ground on which to build support for reform."

See: L. Shepard and C. Bliem. "Parents' Thinking About Standardized Tests and Performance Assessments." *Educational Researcher* 24, no. 8 (November 1995): 25-32.

YOUTH AT RISK

Recognizing Signs of Stress Is the First Step In Keeping Kids from Living in the Streets

School can be a stabilizing force in the lives of runaway and homeless youth, if adults are willing to listen and get involved

BY MARC POSNER

Teresa, as we shall call her, comes from a midsize New England city. Her parents divorced when she was an infant. As she entered adolescence, conflict with her parents escalated. Her stepfather threatened her. She couldn't get along with her father's new wife. School became an exercise in skipping classes, drinking, and smoking marijuana. At 13 she ran away from home for the first time.

Perhaps you've had someone like Teresa in your school: a friendly, outgoing student who suddenly stops participating, wears the same clothes day after day, and struggles to remain awake. She arrives late, leaves early, and eventually just stops coming to school. When her parents are called, they don't know where she is. Too often, they don't care.

A Way of Coping

The Administration for Children and Families estimates that at least 500,000 Americans under the age of 18 spend part of each year living apart from their

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parents or legal guardians. Many leave home after a fight over curfews, dating, or grades. They spend the night with a friend or relative and go home in a day or two.

But a substantial number of youth leave homes in which constant, serious conflict makes it impossible for parents and adolescent children to live together. Running away can be a short-term way of coping—an interval when tempers cool enough for a tense coexistence. Repeat episodes, however, contribute to family instability. The young person leaves home more frequently and for longer periods. The parents become less concerned about their child's absence. Eventually, the youth loses the sense of having a family to return to.

Research indicates that close to 70 percent of chronically homeless youth (sometimes called "street kids") have been physically or sexually abused in their homes. An undocumented but significant number of homeless youth have been ejected by their parents, and are often called "throwaways" or "lockouts."

Poor nutrition, inadequate sleep, exposure to the elements, and lack of health care cause a host of medical problems for runaways. Sexually transmitted diseases, including HIV infection, are epidemic among street kids in urban areas. Life on the street is violent. Runaways are often assaulted or raped. Abuse of alcohol and other drugs is pervasive.

School can be a stabilizing force in the lives of these young people, but it can also exacerbate family problems. Christopher Smith, director of a Pittsburgh runaway program called the Whale's Tale, reports that the number of young people he sees increases around grade reporting time. A bad report card can put enough stress on a dysfunctional family to cause a child to leave, or be thrown out.

Few adolescents are tenacious enough to remain in school while living out of the home. "The first thing to drop out of any runaway child's life is school," observes Sandra McBrayer, head teacher of the San Diego County Office of Education's Homeless Outreach Program. "They are afraid the school will turn them in. Let's be honest. Do you really believe most children are going to wake up at eight o'clock and go to school if they don't have to?"

Signs of Trouble

Withdrawal, as in Teresa's case, is one common symptom of trouble. The student stops participating in classes and other school activities and her attendance becomes irregular. Another common sign is aggression or anger at the slightest provocation.

Sometimes the signs are even more explicit. "Before running away, students will write about their situations in their journals, poetry, and essays," says McBrayer. "They will talk about it. They often tell us how they truly think and feel. And we dismiss it as some sort of macabre drama. We detach ourselves. We have to start listening to what kids are saying—and reading what kids are writing."

To ignore the signs of running away is to miss what may be the last opportunity for a caring adult to intervene before a child winds up on the street. Jennifer Raudonis, a teacher at the Youth Alternatives Boys Emergency Shelter in South Portland, Maine, warns educators that they must abandon stereotypes about runaway and homeless youth, including the "ludicrous" belief that runaways choose to leave home and thus should face the consequences of their actions.

Life on the street is not pleasant. In the last three years, Teresa has lived with her mother, with her father, and in friends' homes, the apartments of "boyfriends," homeless shelters, group homes, psychiatric hospitals, and abandoned buildings.

"At the shelter," she recalls, "they put you out at eight in the morning and you had to stay out till nine at night. You get up, take your shower, and leave. I was there in November. It was cold. I panhandled for money to buy food and drugs and warm clothes. I got in a lot of trouble with drugs. I smoked pot. I used acid. I drank every single day. I did inhalants. I inhaled VCR cleaner. I was extremely vulnerable. I was raped on the street. I slept with a lot of people. I couldn't say no because I was always drunk."

HEL on the Web

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Teresa mutilated her arms with the sharp edges of aluminum cans. She was hospitalized after succumbing to a mixture of alcohol and lithium. She was so drugged up that she failed to notice her own mother watching her on the street—watching just to make sure she was still alive.

How Schools Can Help

What can a teacher, guidance counselor, or administrator do when a child displays the symptoms of becoming a runaway? Deborah Shore, executive director of Sasha Bruce Youthwork in Washington, D.C., suggests that the first thing is to ask if something is wrong. Ask the student to try to identify someone in whom she can confide—if not you, then another adult.

Teresa agrees. "When there is a noticeable drug problem," she says, "call the parents. If there are no parents, call the department of human services. The kid will hate it at first. I would have hated it." She wishes now, though, that someone—anyone—had troubled to intervene earlier in what she calls her "lifetime of problems."

Schools can help find services for homeless students, including tutoring, counseling, job placement, and the things most of us take for granted—

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food, warm clothes, and a place to study, take a shower, and sleep. Many schools cannot provide these services. But most programs for runaway and homeless youth are happy to work with schools. They would rather intervene while the student is still in school than have to try to gain his trust once he has disconnected from adult institutions and entered the street culture.

Homeless youth who try to enroll in a new school while in a shelter or independent living program often find they are not welcome. William Shutteworth, director of the West School in Portland, Maine, describes the "uninviting dance" such schools do: "I need your records. I need your proof of residence. The guidance counselor who deals with your letter of the alphabet won't be here until two o'clock. You can't enter school—it's the middle of November. We're in the middle of a unit. You can't get credit."

This dance reflects anxiety about having to bend the school's program to help someone whose needs exceed those of the average student. It also reflects the stereotype that such students are "bad kids"—unrepentant drug abusers who will "infect" other students.

Educators need to know that there is hope even for those in the most desperate situations. Teresa still finds it hard to believe she is not dead or infected with HIV. She will celebrate her 18th birthday in February. She is enrolled at a regular high school and has a job in childcare. She avoids socializing with schoolmates who experiment with alcohol and other drugs. She sees them as a threat to her hard-won sobriety.

For the first time, she has a boyfriend near her own age. She lives in his mother's home. He has the promise of a welding job after graduation. They both want to attend community college. She might study photography or marine biology. Or she might become a counselor. She believes her experience gives her insight into the troubles of other young people like herself.

Schools that cannot provide services to students at risk of homelessness or those who are trying to re-enter the system should at least help them find placement in an alternative school. The federal government provides funds for almost 400 programs that serve runaway and homeless youth, as well as ten regional assistance providers. Several hundred other programs receive no federal funds. To locate the nearest program, contact one of the agencies listed below.

For Further Information

National Clearinghouse on Youth and Families, P.O. Box 13505, Silver Spring, MD 20911-3505. 301-608-8098.

National Network of Runaway and Youth Services, 1319 F Street NW, Suite 401, Washington, DC 20004. 202-783-7949.

National Runaway Switchboard, 3080 North Lincoln, Chicago, IL 60657. 800-344-2785.

"School Programs and Practices for Homeless Students." Digest no. 105 (April 1995). ERIC Clearinghouse on Urban Education, Box 40, Teachers College, Columbia University, New York, NY 10027. 800-601-4868.

Marc Posner is senior research associate at Education Development Center in Newton, Massachusetts, and author of two books on runaway and homeless youth.

LETTERS TO THE EDITOR

Making Democracy Work in Schools

To the Editor:

That decisions made by teams aren't better than those made by the principal acting alone (see "Shared Decision-Making...," *HEL*, November/December 1995) may not be the only consideration in measuring the differences between the two models. The first time I played that game in which survivors of a desert crash must prioritize items on a list of available resources, my group really didn't care what the "experts" said the right answers were. We felt good about our process and our decisions—and that, in the long run, would probably have helped us survive as a team longer than the experts thought we would.

Precisely because their input is genuinely sought, teachers will work harder and, as a team, might also revise their decisions more willingly (and faster) than the lone administrator who might feel more conspicuous (and vulnerable).

One way to get faculty more quickly involved in considering reform is to depend on smaller discussion groups. What Chomsky says about a society's favored truths resisting change applies also to schools: larger groups are less likely to challenge those truths; individuals in smaller groups, however, feel more free to "think outside the box" because they feel less scrutinized.

I see this in my classes. Two groups of seniors were discussing August Wilson's *Fences* the other day. The first class, more comfortable as a large group, remained intact and had a fruitful discussion. The second class—on its own initiative—split up into groups of three. To a person, each student participated more than they would have in a large-group discussion, and the ideas flowed. When they regrouped, the disagreements in interpretations surfaced. Having already discussed them in small groups gave the speakers more confidence to state and defend opposing viewpoints.

Democracy can work even more effectively with students and teachers if the circle can get smaller, but whoever leads cannot afford to be an expert.

Andrew J. Brescia
Columbus, Ohio

The writer chairs the English department at Columbus Academy.

Writing Centers Also Help with Application Essays

To the Editor:

I appreciate Sanford Kreisberg's suggestions to secondary school students writing college applications (see "The Application Essay...," *HEL*, November/December 1995), but would add that many schools, both public and private, offer another means of assisting students—the writing center, where students can work one-on-one with a writing teacher. Writing center staff members don't give answers; they ask students questions to help them focus, think, organize, and take risks.

For more information about establishing and maintaining a writing center, contact Christina Murphy, president, National Writing Centers Association, William L. Adams Writing Center, Texas Christian University, Box 32875, Fort Worth, TX 76129; tel.: 817-921-7221; e-mail: murphy@gamma.is.tcu.edu.

Pamela B. Childers
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THE GREAT READING DEBATE

Whole Language or Phonics? Teachers and Researchers Find the Middle Ground Most Fertile

As the debate between advocates of the two methods becomes more strident, evidence from research and practice points to a balanced approach

BY BARBARA MATSON

In her new book, *The Alphabetic Labyrinth*, Johanna Drucker recounts ancient beliefs about literacy. The Arabs, she writes, believed that Allah himself taught Adam to write. She does not say if Allah used a phonics or a whole-language approach.

Educators and academics have been arguing since Adam, it seems, about how best to teach reading, the most basic building block in a child's education. "If you fail in reading," says Jeanne Chall, professor emerita at the Harvard Graduate School of Education, "you fail in almost everything else."

Across North America, large numbers of children are having trouble with reading; many are being diagnosed with learning disabilities or reading disorders. The 1994 National Assessment of Educational Progress (NAEP) school reading scores (released in April 1995) show only a third of fourth-graders reading at proficiency levels.

For decades now, what is sometimes called the Great Reading Debate has raged between advocates of two main philosophies of reading instruction: the whole-language method, which emphasizes reading for meaning, the use of children's literature instead of basal readers and worksheets, and the teaching of skills in the context of reading; versus the phonics or code-oriented approach, which emphasizes direct instruction in letter-sound relationships and patterns. The evidence from research—and the testimony of expert teachers—increasingly points to the conclusion that *neither* method by itself is as effective as a balanced approach that combines the two.

Instead of reaching consensus, however, the combatants have become more strident. Every time a new test shows falling reading scores, each camp claims the other side's influence is creating a crisis in the schools. Some conservative critics regard whole language as feel-good, fuzzy-headed liberal nonsense. Some liberals, in turn, view the attack on whole language as part of a strategy to destroy public education.

The argument threatens to become so polarized and politicized that agreeing on a middle ground seems at times impossible, and the voices of reason and experience are drowned out.

Back to Basics

The debate erupted anew last year in California after alarming news stories about the NAEP scores ranked the state's fourth-graders next to last in reading proficiency among the 39 states participating—even though most informed observers agree that state-by-state comparisons of average scores mean little without taking into account the racial and economic status of the students. California had adopted a whole-language approach for teaching language arts in 1987. The state legislature, reacting to the test scores, unanimously passed a new law scrapping whole language and ordering an emphasis on phonics. "Back to basics," said the politicians and the parents. A report on the television show "20/20" on October 13, 1995, added fuel to the

INSIDE:

Reading and Writing

The Case of Invented Spelling

Creating Family Stories: A Year-Long U.S. History Project

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fire, attributing the poor results in California to whole-language teaching and concluding that the method simply doesn't work.

Advocates of whole language say the California test results are misleading, and that blaming poor scores on whole language ignores the state's growing bilingual population, its poor funding of schools, its large class sizes. Others argue that it's not the approach, it's the practitioners.

Many scholars thought whole-language versus phonics arguments were over.

California never meant to drop phonics from its reading instruction program, according to Glen Thomas, director of curriculum frameworks for the California Department of Education. But teachers and administrators misunderstood, believing that adopting a whole-language philosophy meant abandoning phonics. "We never intended to get away from basics," Thomas says. "In our effort to have stronger literature, to get children to write more, we weren't giving enough attention to beginning reading. And their weaknesses were not showing up until fourth grade, which is too late."

Many scholars thought the whole-language versus phonics arguments were over. Research summaries by Jeanne Chall in 1967 (*Learning to Read: The Great Debate*, updated in 1983) and by psychologist Marilyn Jager Adams in 1990 (*Beginning to Read: Thinking and Learning About Print*) seemed to establish that some sort of direct phonics instruction was essential, particularly for children from disadvantaged backgrounds with little or no preschool exposure to reading and for children with cognitive disabilities (see "School Influences on the Reading Development of Low-Income Children," *HEL*, January 1988).

At the same time, whole language brought many exciting changes to classrooms: an emphasis on early writing, the use of real children's literature for reading, and a variety of activities encouraging kids to generate projects arising from their own questions about the world around them. But often these innovations came at the expense of phonics.

Is Reading Natural?

The whole-language approach—and the term is so slippery that in 1990 one researcher devoted an entire study to reviewing the literature for definitions—views reading acquisition as a natural process, comparable to learning to talk. Many research studies have shown this is not so, that learning to read is not natural. "All the world speaks," Chall points out, "but only half of the world can read. Reading is not God-given. It is manmade. It has to be taught."

Advocates of phonics believe children must be given structured, sequential, direct instruction in the relationship between letters and sounds. Whole-language advocates believe phonics should be taught, but only in the context of reading and writing, not as discrete skills.

Whole language, argue its critics, allows some children to "fall through the cracks." Without the scaffolding that direct teaching of phonics provides, some children don't get it. They don't learn the connections between letters of the alphabet and the sounds they represent, and they struggle to read. Their reading gets worse as the material gets more complicated in third grade.

The argument against phonics, of course, is that it's boring. Drills, workbooks, exercises, basal readers—yawn. Many teachers insist that whole language makes students avid readers.

Teachers of whole language say they teach phonics as opportunities arise to talk about the sounds of letters. Proponents of the method insist that failure is more the fault of teachers who haven't learned how to teach whole language, rather than of the method itself. But as Chall points out, what good is a system if only the best practitioners can use it?

Meanwhile, as researchers debate the significance of the studies and test results, teachers—especially new teachers—are left hanging. Many are trained only in the methods favored by their professors, who extol one approach while damning the other. "New teachers are sure that one of the methods is very evil," says Mary Russo, principal of Boston's Mason Elementary School, "but they don't know which one it is."

Politics further complicates the issue. Historically, conservatives have favored phonics, representing a more traditional and controlled approach, while liberals have favored whole language, which allows teachers and students more choices. The political agenda may be irrelevant to the children, but it surely affects the decisions of the adults who choose the curricula. Conservative Christians are uncomfortable with whole language, points out Ellen Brinkley of Western Michigan University, because they don't like the idea of students constructing meaning out of texts—specifically the Bible, which they consider to be the literal word of God.

"This is political and not educational," whole-language theorist Ken Goodman of the University of Arizona says of the curriculum changes in California. "The whole assessment of a crisis is unwarranted. The whole thing started with the elections in several states in November 1994, California being one."

"Phonics is a method," says one administrator. "It's one of many things in the teaching of reading."

Goodman says the poor reading scores in California are absurd and reflect the bias of the testmakers. He emphasizes the involvement of right-wing political groups in the pro-phonics camp and says researchers like Chall are being used by those whose agenda is to destroy public education.

At the same time, many educators who would never identify themselves

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as right-wingers or even as conservatives are concerned about problems in using a strict whole-language approach.

Reality Versus Zealotry

Increasingly, researchers are finding better results from teachers who take a balanced approach—that is, classrooms that offer rich literature, writing, lots of shared reading, and direct instruction in phonics as well—especially with children from disadvantaged backgrounds. A 1995 study by Karin Dahl of Ohio State University and Penny Freppon of the University of Cincinnati compared children in basic-skills and whole-language classes and concluded that the latter showed greater gains in reading comprehension and became more independent readers. But the whole-language classrooms they studied provided abundant instruction in basic skills.

Many teachers, however, have been taught only one method of reading instruction. In turn, they teach only what they were taught. In California, Glen Thomas notes, teachers are required to take only one course in reading methodology. "That's not going to be enough," he says.

Experienced teachers have known all along that you can't reach every kid the same way. Keith Stanovich of the University of Toronto notes that teachers themselves, in their classrooms, are "increasingly finding the middle way."

Bill Honig, the former superintendent of public instruction for the state of California, believes that teachers—even those who love whole language—will readily adopt a balanced approach if it works. "In California, half the kids coming in to second grade can't read," says Honig, now a professor of education at San Francisco State University. "And it's not just California. It's all over. So teachers are willing to try new things. The best antidote to a zealous philosophy is reality."

While the zealots argue, some teachers and schools have created pockets of successful reading instruction. They use different names to describe what they do: a balanced approach, an integrated curriculum, whole language with phonics, phonics-based and literature-enriched. What's important is that the strategy appears to work.

Doing What Works

Three different schools in the Boston area offer evidence that experienced teachers using a middle-of-the-road approach succeed in teaching beginners to read. At the Mason School (an inner-city public school), the Oakdale School (a suburban public school), and the Dexter-Southfield Schools (two affiliated single-sex independent schools), virtually every first-grader learns to read at least a little.

What do these schools have in common? All have relatively small classes—no more than 16 children per room. All use basal readers with controlled vocabularies, as well as a rich trove of children's literature and child-authored books and stories. All hold daily writing workshops and shared reading sessions. And all use structured phonics programs, often with workbooks.

At the Mason School in the Roxbury

LETTER TO THE EDITOR

Don't Give Up on Performance Pay

TO THE EDITOR:

Michael Sadowski and Edward Miller are correct in arguing that redesigning teacher compensation systems and improving student performance are not one and the same (see "New Ideas Like Collective Incentives and Skill-Based Pay Raise the Same Old Questions," *HEL*, January/February 1996). In fact, they are two completely separate issues. Failure to understand this is a tremendous source of frustration for members of school boards and the public when such redesigned plans are implemented and the results in terms of student achievement fall short of expectations.

If we are intent on raising student performance, as we should be, we should focus on developing higher academic standards and meaningful assessments of student mastery, not redesigning the way we pay teachers. On the other hand, while the authors rightly state that performance pay plans do not necessarily motivate teachers, they ignore the fact that they do compensate highly motivated teachers for their performance in a variety of areas that have gone unrewarded for far too long.

Performance pay can be problematic, but it doesn't have to be. Those plans that seem headed for failure have suffered from flawed design and implementation strategies, as well as unrealistic expectations. The Kentucky plan is a good example of how not to redesign a system of compensating teachers. The fact that it was imposed by the state legislature, participation was mandatory, bonuses were awarded in lump sums to schools and distributed after the fact, and there was no consideration of teacher professionalism or growth may well have doomed it from the start.

Here in Douglas County, Colorado, a team of 30, including 20 teachers and 10 representatives of the district and community, spent more than nine months developing the basic design for the teacher performance pay plan. The final plan separates base salaries, which are determined by a formula, and incentive bonuses awarded for additional responsibilities, successful completion of group incentive plans, professional skill development, and outstanding performance by individual teachers.

The plan has been in effect for almost two years, and an interim report conducted by Gene Hall at the University of Northern Colorado indicates wide support among teachers. There is still much work to be done, but we believe the process was critical in the development of a sound and workable plan.

It is true that the old concept of merit pay has not worked in public education, but that doesn't mean that we shouldn't continue to explore alternatives. After all, performance pay for teachers may not produce a perfect method of compensating teachers, but neither has the single-salary schedule. Performance pay isn't a magic bullet for the ills of our schools, and it isn't the solution to low student achievement. It is an effort to rethink how we compensate, recognize, and reward professional educators.

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section of Boston, teachers and administrators have been collaborating for five years on building a successful reading program, adapting the whole-language approach the Boston system had instituted. "Boston has been kind of all or nothing," says Principal Mary Russo. "With whole language, they thought, 'This is it: the magic bullet.' So they went overboard. What they discovered was that children weren't performing and they still can't read.

"Our reading program was a response to the question 'How can we keep as many kids as possible from falling through the cracks?' Five years ago Mason was the least chosen school of Boston's elementary schools. Now we're 11 percent above capacity and we have waiting lists for the early childhood program and grade one. It worked." Reading test scores back up Russo's claim. Mason students used to rank in the 40th to 50th percentile in reading. Now they are up to 90th.

In Gwen Stith's first-grade class at Mason, students are taught one of three phonics programs, chosen to fit the individual child's needs. On a typical day, Stith and an assistant, Maria Costa, combine whole-language and direct instruction as they weave different strands in and out of the children's tasks.

They begin with the writing workshop, where children write stories of their own choosing. Siobhan is writing about bows and arrows. She has brought a rather advanced book about Indians from home and she says, "I don't read it, I think about it. I look at the pictures." But then Siobhan writes her own story from what she sees in the pictures, using words she knows and invented spelling for words she doesn't yet know. The class then gathers to talk about problems in their writing and how they have solved them.

Next comes the shared reading of a "big book." First they read an old favorite aloud together. Then they "walk through" a new book, with Stith covering up the words as the children look for details in the pictures and suggest scenarios for what's happening. Stith encourages the children to make predictions before reading: "In the three little pigs story the pig had a bag on a stick over his shoulder, just like this mouse. Why did the pig have it? What might the mouse do with it?"

Now the children split up into reading groups. A group with Stith reads a story about Angus and the circus and receives direct instruction in how to decode a new word: *saw*. Stith blocks the *a* and *w* and asks the children to sound out the *s* sound. After reading the story, the children work on a phonics worksheet on *see/saw*.

In another group, Costa reads a story from the basal reader. She prepares the children for new words by showing them flashcards with the words written on them. The children sound out the words. A third group of children is working on the poem "Twinkle Twinkle Little Star," copying it from a big board, while a fourth group works with a young City Year volunteer on sentence structure, pasting words together to make a sentence that tells about the book they have just read in their group.

Creativity with Structure

At the Oakdale School in Dedham, Massachusetts, whole-language methods are also combined with direct phonics instruction. "When I first came to Dedham," says Alison Peternell, a first-grade teacher at Oakdale, "they gave me the phonics workbook and I said, 'No way! I'm not using it. This is not what I was trained to do.'"

> ***"New teachers are sure that one of the methods is very evil, but they don't know which one it is."***

But Peternell did start to use the book—and she ended up changing her mind about its value. Now she won't give it up.

"The workbook structures how I teach phonics," she says. "But that's just one component. Today we read a story to look at what the book was saying—the whole language part—and another day we'll do the phonics of the story. They're all components that bring it all together for kids."

The first period of the day at Oakdale is for writing. Peternell has written on the board at the front of the class, in large letters, "If you *went* to the moon, what *would* you do?" The kids then write their own stories.

At circle time, a few of the children read what they've written. The teacher asks each child questions about his story or tells what she likes about it. Brittany reads a story she wrote at home about the moon. "Lots of times kids get very excited about what we're studying," says Peternell.

Next, one child is asked for a "sentence of the day" and Peternell writes the sentence on the board as the children spell it out, word by word. There is lots of practice with phonics here: "Could someone come up and circle the *oo* sound? Could someone circle the *ay* sound? That's right: yester*day*, like in *play* and *may* and *bay*."

Short "a" is the next topic of the day, and the kids sing a song, "I Like to Eat Apples and Bananas," to gain familiarity with the short "a" sound. The children read a poem out loud together, with many short "a" words. They talk about the poem, read it together, and identify the short "a" words. Then comes the phonics worksheet, for practicing the skills they have been working on.

"People often think of whole language as 'Whatever you do is fine—go off and read something,'" says Peternell. "You can't do it that way. The class will get out of control. If I get a phonics sheet back that's messed up, then I know I need to work with that particular child—or maybe the whole class—on that topic.

"It's now December. I've had them for three months and these kids can read. They can pick up a book and read. And their writing has improved dramatically. They can sound out words phonetically. They can write something with meaning."

The Dexter-Southfield independent schools in Brookline, Massachusetts, offer what they call a traditional phonics-based approach, but their program, too, is in fact a combination of strategies. "It's very directed," says reading teacher Deborah Harrison. "This is reading, this is phonics, this is writing. The children know it's that part of the day."

Yet the students spend much of their day writing stories and journals and reading literature—just what whole language calls for. "It's more of a language arts program," says Jackie Wright, the school's administrator. "Phonics is a method. It's one of many things in the teaching of reading. There are some children who aren't going to get phonics without specific instruction in it. There isn't one be-all method of teaching."

A Call for Consensus

Educators in Cape Elizabeth, Maine, a small, middle-class community with a highly educated populace, struggled through the first five years of a new whole-language regimen. No systematic phonics instruction was given before third grade. Then tests in 1991 showed that 42 percent of the second-graders were reading below grade level and parents complained that their kids couldn't read. Constance Goldman, then a brand-new superintendent, balanced the whole-language curriculum with more direct skills instruction. Do what works, she told the teachers.

"What we've been trying to build is a common-sense amalgam," Goldman says. The school system has not yet published recent test results, but Goldman claims reading scores have improved. "It's nice to think that if you read to children they'll love to read. But it isn't just wanting to read. It's learning to decode."

Now scholars, including Marilyn Adams, have begun to call for consensus on the balanced approach. In his new book, *Teaching Our Children to Read*, Bill Honig says that both a literature-driven and language-rich reading program and a comprehensive, organized skill development program are essential. Gerald Duffy, professor of teacher education at Michigan State University, encourages teachers to use elements of whole language, direct phonics instruction, or both, as the situation calls for them.

It is time for the debate to cool down and for advocates on both sides to recognize the wisdom of Jackie Wright's philosophy: "Teach what works."

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THE POLITICS OF LITERACY

The Case of Invented Spelling: How Theory Becomes Target Practice

A new way of looking at children's experiments with spelling turns into a cause célèbre for conservative critics of education

BY EDWARD MILLER

Of all the developments in reading research during the past 30 years, few have provided as much fodder for the wars over whole language as "invented spelling." Starting in the late 1960s and early 1970s, Charles Read and other researchers noticed that young children's writing revealed important information about how they make sense of spoken language and construct strategies to represent what they hear (see "Teaching Spelling," *HEL*, November 1985). Linguists like Carol Chomsky pointed out that early writing, with alphabet blocks and similar materials, was a powerful way to encourage reading.

"Children ought to learn how to read by creating their own spellings for familiar words as a beginning," Chomsky wrote in 1971 in *Childhood Education*. "What better way to *read* for the first time than to try to recognize the very word you have just carefully built up on the table in front of you?"

Chomsky emphasized the importance of "being attuned to the child's pronunciation" and not inhibiting preschoolers' first attempts to write by insisting on proper spelling. She told the story of three-year-old Harry, who had learned how to spell his name, which he pronounced "Hawwy." When he tried to write the word *wet* he chose the initial letter *r*.

"Now *r* is correct for him, as a matter of fact," wrote Chomsky. "In this child's pronunciation, *r* and *w* are alike when initial in the syllable. For him *wet* begins the same as the second syllable of his name."

She continued: "Had I said 'No!' when Harry chose the *r* and insisted on *w* (which corresponds to no reality for him), he would have gotten that sad message children so often get in school: 'Your judgments are not to be trusted. Do it my way whether it makes sense or not; forget about reality.' Far better to let him trust his own accurate judgments and progress according to them than to impose an arbitrariness that at this point would only interfere."

Research on invented spelling led to a developmental theory of how children experiment with phonemic rules and patterns, and scholars urged teachers to allow children to spell inventively in the earliest stages of learning. This view fit neatly with the emerging philosophy of whole language, which emphasized early writing and eschewed the repetitive drills and workbook exercises of strict phonics instruction.

Gone Haywire

To the critics of whole language and other "child-centered" learning theories, the very idea of "invented spelling" is ridiculous. The notion that teachers should ignore spelling errors—or actually encourage children to spell words wrong—confirms their view that the liberal education establishment has abandoned traditional values and gone completely haywire. The most vocal critics pounce on invented spelling as a source of horror stories that illustrate just how mindless American education has become.

Charles Sykes relates one such story at the beginning of a chapter called "The New Illiteracy" in his 1995 book, *Dumbing Down Our Kids*, which received admiring reviews in the *Wall Street Journal*, the *New York Times*, and *USA Today*: "Mrs. Wittig couldn't fathom why her child's teacher would write 'Wow!' and award a check-plus (for above average work) to a paper that read: 'I'm goin to has majik skates. Im goin to go to disenelan. Im goin to bin my mom and dad and brusr and sisd. We r go to se mickey mouse.'"

Sykes explains that "many educationists [his term for trendy, liberal educators] in charge of teaching reading and writing no longer believe that it is necessary to teach or to correct spelling. Educationists noticed that many children misspelled words and realized that it would take a great deal of time, effort, and commitment to fix the problem. Instead, they discovered 'invented spelling.' Children weren't getting the words wrong, they were acting as 'independent spellers,' and any attempt to correct them would not only stifle their freedom, but smother their tender young creativity aborning. Such ideas have been widely seized upon by educationists who see the natural, unconscious, and effortless approach to spelling not only as progressive and child-centered, but a lot less work as well."

Advocates of whole language, Sykes continues, "believe that children learn 'naturally,' that children learn best when 'learning is kept whole, meaningful, interesting and functional,' and that this is more likely to happen when children make their own choices as part of a 'community of learners' in a noncompetitive environment. 'Whole language' advocates describe 'optimal literacy environments,' which they say 'promote risk taking and trust.'"

Sykes doesn't bother to explain the actual origins of "educationist" ideas about invented spelling in developmental psychology and linguistics. But he adroitly skewers the whole-language movement by making fun of its warm and fuzzy jargon while suggesting that the real reason why this philosophy has become so popular is that teachers are lazy.

Missing the Point

One-sided as Sykes's attack is, it is not entirely off-base. Some teachers have adopted practices associated with invented spelling in inappropriate ways. Read, Chomsky, and other researchers wrote about the value of invented spelling in the context of very young children's first attempts to write and read. They encouraged teachers to pay attention to the systematic thinking revealed by kids' inventive spelling (rather than to see only errors to be corrected) and to use these insights to guide their teaching strategies. They never expected invented spelling to become a classroom activity in and of itself or to replace the organized teaching of proper spelling in elementary school.

Early researchers never expected invented spelling to become a classroom activity in and of itself.

Yet that is just what has happened in many classrooms. Marcia Invernizzi of the University of Virginia and colleagues argue that Read's findings have been misapplied. They say that his fundamental insight, "that invented spellings provide a direct clue to a child's current understanding of how written words work, and that direct instruction in spelling can be timed and targeted to this understanding, has, for the most part, been missed."

The theory of developmental word knowledge traces children's understanding across three overlapping levels of English spelling: sound, pattern, and meaning. In the first stage, children perceive the direct one-to-one correspondence between letters and sounds. At the second tier, they realize that the system is more complicated and begin to recognize letter combinations and patterns that have an indirect relation to sound—that a silent *e*, for example, can affect the pronunciation of the vowel preceding it. At the third level, they begin to observe the connections between spelling and meaning, as in polysyllabic Latin- and Greek-derived words. Thus, the second syllable in *competition* is spelled with an *e*, not because of its sound but because it is related to the word *compete*.

Invernizzi and her colleagues outline a system of organized spelling instruction that is guided by teachers' analysis of their students' invented spelling and their levels of development. They give examples such as the following writing sample from Tasha, a sixth-grader:

> If I could be the managor of the cafeteria at Linkhorne Middle School, I would make some awsome changes. The instalation of a sound system would by my first decesion. The kids could ro-tate bringing there own choice of musick. Then I would make radacle changes in the menu like we'd have hamburger and fries and no rootine school menues.

The researchers note that Tasha has a free-flowing style and uses polysyllabic words. They write that "the teacher needs to be able to see Tasha's spellings not as errors but as inventions that signal the next move toward correctness that Tasha needs to make." Tasha is poised, they argue, to enter the "meaning" tier in her word knowledge, but her spelling inventions "revolve around the pattern principle of the tier before."

The insights gained from such research are valuable, and many teachers will agree that it is important to recognize the spirit in Tasha's writing rather than to focus only on its flaws. It would be absurd to accuse Invernizzi of believing that it is not necessary to teach spelling. But we also see trouble brewing here: to say that Tasha's misspellings are "not errors" is to guarantee that some sixth-grade parents will panic. Thus the reasonable investigations of researchers become the inflammatory rhetoric of exposés and talk radio.

The Real Question

Even some teacher-friendly publications have obscured rather than illuminated the invented-spelling feud. *NEA Today* published a "debate" between two third-grade teachers on opposite sides of the issue. But the headline—"Can Kids 'Lrn tu Spel' by Misspelling?"—reveals a fundamental misconception about the role of invented spelling. Of course kids can't learn to spell by misspelling. The real question is, "Can teachers learn to teach better by seeing misspellings in a different way?" The defender of invented spelling in this debate, unfortunately, did nothing to clarify the point.

Advocates of whole language have been bludgeoned with the club of invented spelling abuses, but many experts who are convinced of the value of invented spelling actually favor a balanced approach to the teaching of reading that combines whole-language and direct phonics instruction (see page 1). "The process of invented spelling is essentially a process of phonics," writes Marilyn Jager Adams in her landmark study, *Beginning to Read*. "The evidence that invented spelling activity simultaneously develops phonemic awareness and promotes understanding of the alphabetic principle is extremely promising, especially in view of the difficulty with which children are found to acquire these insights through other methods of teaching."

Teachers need to be aware of the nuances of research in invented spelling and the larger controversies they relate to. Methods for teaching reading and writing are not all-or-nothing propositions: encouraging young children's experiments with language is not inconsistent with direct instruction in phonics or with a teacher's commitment to the importance of correct spelling.

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CLASSROOM VOICES

Creating Family Stories Leads Students to a Richer Understanding of U.S. History

Two teachers expand the idea of having students write "in character" journals into a year-long project, with surprising and gratifying results

BY PETER GOW AND ALICE DAVINO

An experiment in enlivening the study of United States history at our school this year, involving the writing of detailed, extended journals about made-up families, has succeeded beyond our best expectations. The project was informed partly by new research into the nature of learning and intelligence and by ideas like portfolio assessment, but in many ways it recaptures a kind of learning that goes back to the progressive educators of the 1920s.

In brief, each student generated a sustained story about a single mythical family from the early Colonial period onward. Through journals, letters, and meetings in which the students played the roles of characters they had created, they used the voices and viewpoints of family members to interpret great events and trends in American history in the context of the lives of individual people of the time. As we found while researching a history of Beaver Country Day School for its 75th anniversary this year, this is precisely the kind of learning the founders had proposed for our original curriculum: "hands-on learning" through a process of research and re-creation that would engage both the creative spirit and the analytical mind.

A Year-Long Class Project

In recent years we have been exposed to much thinking on curriculum improvement. We attended all-day workshops with the ATLAS Communities Project, based at Education Development Center and Harvard's Project Zero, on developing interdisciplinary curricula. Our middle-school teachers have worked for several years to develop a system of portfolio assessment, and most of our faculty have attended workshops with Grant Wiggins and others on authentic assessment strategies.

As U.S. history teachers, we wanted to create a year-long class project that incorporated the best of what we had learned about curriculum and assessment. Our criteria were straightforward. A good assessment tool, we believed, should

- be flexible, challenging students to explore aspects of American history from a variety of viewpoints within the frameworks of political, economic, and social history;
- provide rich opportunities for historical research, including the chance for students to explore their own family and community histories;
- be conceptually cumulative, leading students to understand history as a human process and not an assemblage of facts;
- be susceptible to a consistent and intelligible form of evaluation, preferably one that allowed for a progressive raising of standards and expectations;
- and allow students to develop their own "deep background" of understanding of U.S. history, freeing class time for discussion of themes and concepts on a high level.

In the end, we settled on the idea of having each student imagine a family at least one of whose members lived before 1700 in what was to become the United States. We had used "in character" journal assignments before with some success, but in this case we decided to expand the scale dramatically: each student's journal family would continue its life, taking authentic twists and turns, as families do, through American history into the present era. Students submitted journal entries in batches, broken up into chronological periods coinciding with distinct historical eras (e.g., 1763-1775 or 1775-1785), together with a family genealogy that included members not "featured" in the entries themselves. Soon we added the requirement that each submission include a bibliography.

Is All History Local?

We asked our students to be inclusive and even daring in visualizing each character's race, religion, gender, and socio-economic status. We hoped they would create a diverse virtual America that reflected the reality of the growing nation. They responded by inventing Native American characters and families in slavery. We also encouraged them to incorporate issues of social and geographic mobility into their stories; the scion of one student's Native American line, for example, attended Dartmouth College and assimilated (with difficulty, but plausibly) into white society.

Some families pressed toward the frontier with a restlessness reminiscent of Charles Ingalls and Jim Bridger. Others remained in one region. One student with strong family roots in York, Maine, kept his fictional clan steadfastly in that town, using local history resources to enrich his story with incredible detail. The narrowness of his characters' world and the self-interest they displayed against the great backdrop of national events (how does the end of the Revolution affect *me?*) have led us to speculate whether Tip O'Neill's famous dictum about politics can be extended: Is all history local?

As the year progressed we saw further possibilities. We asked students to include exchanges of letters as a way of forcing them to explore multiple viewpoints on specific issues (westward expansion, for example, and the Civil War). Some of these letters were truly gripping. From Brian Schechter, writing as an American soldier in World War I: "We would talk on your porch and get all worked up about how Wilson needed to be a man when 124 U.S. lives were ended on the *Lusitania*. We would walk around flailing our arms... on our high porches, above the sidewalk, looking down at the world. We did not understand anything then. Not only did we not understand America, but we did not understand war. Samuel, it is awful here. I live in ditches with disease traveling in the air like a rumor at a party."

On occasion we have assigned a required "menu" of topics to which students must refer in their writing. An art class took many students to the Winslow Homer exhibit at the Boston Museum of Fine Arts; we assigned them to include their characters' responses to the paintings in their journals—as if they were seeing them in Homer's time.

In one recent exercise, we asked students to research the "endgame" of the Civil War and the early Reconstruction period before gathering, in character, to discuss the matter. Set as a public meeting of the sort common in the nineteenth century, this gathering was in fact structured and evaluated as a Socratic seminar around this essential question: How can the nation be reconstructed? (See "Conversation in Classrooms: Who Are Seminars For?" *HEL*, March/April 1992, for more on Socratic seminars.) This meeting was the first chance students had to *speak* in the voices of their characters (some of whom were citizens of the former Confederacy), and the results were memorable.

An Assessment Rubric

One of the most successful elements of the project has been the assessment rubric we developed. Using a four-point scale ("4" being work that exceeds expectations in all respects), we judge the journals by four criteria, which are clearly defined on the evaluation sheet for each assigned body of work:

1. *Historical content:* Inclusion of significant topics and accurate evidence; knowledge of era; depth of research and understanding; use of detail to establish factual background.
2. *Historical analysis:* Analysis of historical trends and themes; use of detail to establish point of view; appropriate point of view; acknowledgment of differing opinions or viewpoints; logical and accurate analysis.
3. *Development of content:* Establishment of theme; clear logic and presentation of evidence; development of character and issues; clear point of view; plausibility.
4. *Writing style:* Proper sentence structure, paragraph formation, spelling, usage, grammar, and vocabulary; effective transitions.

Each of these criteria has proved itself to be sufficiently open-ended to allow the baseline standard to rise dramatically over the course of the year. Not only are students expected to place their characters' experiences in a detailed historical framework (no. 1 above), but they must also reflect deeply on the great issues (no. 2) even as they present evidence of "real" individual lives in the context of their times (no. 3). The final category speaks for itself, although we have cautiously rewarded those students who have attempted to develop writing styles appropriate to other times.

The issue of summary assessment remains. To a large extent we manage this through class discussion, and the Socratic seminar holds great possibilities we have only begun to unlock. We have tried to build the course around a few overarching questions, such as, What is an American? What are the fundamental issues in American history? These questions, unaltered, can serve as the essay topics for examinations, much as the French baccalaureate exams seek complex and fact-filled responses to deceptively general questions.

We have learned several important lessons from this experiment. One is that a simple idea can be embellished and developed to a nearly infinite degree. Another is that the best of the new educational theories, when understood thoroughly, can be applied without having to up-end existing curricula or existing frameworks of expectation. Students have responded enthusiastically to the project, and in fact there has been some clamor for ways of expanding their audience (we are pondering a small publication of selected journal entries). Although our expectations were initially modest, we are now confident that we can use this family journal project to bring our students to a richer and more personal understanding of American history. Our forebears at Beaver, we like to think, would be pleased.

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EDUCATIONAL FASHIONS

Perception Versus Reality: School Uniforms and the 'Halo Effect'

Uniforms may simply make adults think the kids wearing them are better behaved and smarter—but is that good or bad?

BY MARC POSNER

American schools seem to be on the brink of a new fashion craze. The trendsetters are not movie stars or grunge rockers. They are school administrators, teachers, and the president of the United States, who, in his 1996 State of the Union message, declared that "if it means that teenagers will stop killing each other over designer jackets, then our public schools should be able to require their students to wear school uniforms."

This endorsement was followed by the distribution of a U.S. Department of Education *Manual on School Uniforms* to every school district in the country, a presidential visit to the Long Beach (California) School District that pioneered public school uniform programs, and a presidential radio address touting "school uniforms [as] one step that may be able to help break [the] cycle of violence, truancy, and disorder...."

INSIDE

How Teachers Can Prevent Plagiarism

Kidding Ourselves About Dropout Rates

Teaching Young Children About Native Americans

Increasing numbers of American public schools are requiring, or promoting, uniforms. Many resemble the ensembles worn by parochial and private school students. Others are less formal combinations of jeans and T-shirts imprinted with the school insignia. The educational press and on-line discussion groups for teachers and administrators are filled with testimonials to the impact of uniforms. Carl Cohn, superintendent of the Long Beach Unified School District, claims that requiring uniforms in the elementary and middle school has led to results that he would not have believed possible.

"There has been an overall 36 percent reduction in school crime," says Cohn. "Fighting at the middle school level was reduced by 50 percent. Weapons were down. Assaults were down. Vandalism was down."

The *Manual on School Uniforms* includes an impressive list of "potential benefits": decreased violence, theft, and gang activity, and increased discipline and concentration on schoolwork. Teachers and administrators across the country echo this enthusiasm, adding increased attendance, a rise in student self-esteem, and a lessening of tensions produced by ethnic and income differences to the list.

The Effect of Attention

The question of whether uniforms are really responsible for the good effects attributed to them is still open. Superintendent Cohn admits that not enough is known to state with any certainty that uniforms were the primary factor in his district's recent achievements. "The single initiative that was systemwide K-8 was, in fact, uniforms," he says. "But I would never say we aren't doing other things. We are doing conflict resolution. We're doing peer mediation." The district also made a concerted effort to increase parent involvement in the schools.

Cohn also recognizes that the attention focused on his school system may be producing its own impact. "As all researchers know," he points out, "in the first year of an experiment, people's excitement about the attention can have a positive effect. Even before the presi-

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dent's visit, we had incredible media attention. From opening day in September, we had television cameras on campus. We have a whole bunch of parents who are much more enthusiastic about our school system because of the uniforms. The number of volunteers has increased. The philanthropic community has taken a much more active interest in our school system. It is really hard to know exactly what is producing the positive effect. We would like serious researchers to come in and find out."

Unfortunately, there has been little research on the subject. The District of Columbia was the site of one of the few studies done on the effects of uniforms. Eva Chunn, a researcher with the district's Program Assessment Branch, reported that some principals wanted uniforms because they believed "students were not attending school because they were ashamed of their clothes." A student that Chunn interviewed reported that this shame caused her to miss so much school that she was retained a year. The study did not produce any concrete evidence, however, that uniforms affected attendance, behavior, or academic achievement. It did reveal that "principals felt there was something about students in uniform, especially boys with ties, that makes them behave better"—a belief shared by teachers and parents.

This belief may provide a clue to what is really going on when students wear uniforms. Research in psychology suggests that uniforms create a "halo effect"—that is, no actual change in students' attitudes or behavior, but a change in the way adults perceive the uniformed students.

This change in adults' perceptions may well have its own effects on the students. A substantial body of research shows that teachers' perceptions of students influence the way teachers treat students—and, consequently, the way these students behave. Typically, this research has focused on inequities in the ways minority students are reported for disciplinary infractions, and teacher propensities to "teach to boys," especially in science and mathematics. But one researcher has looked specifically at the ways kids dress and found a significant halo effect.

Button-Down Bias

Dorothy Behling of Bowling Green University studied how student clothing affects teacher and student perceptions. Behling controlled for other characteristics (such as facial expression and ethnicity) that can affect personal perceptions by testing her subjects' reactions to photographs of models in which the faces were not visible.

A study of the Washington, D.C., schools produced no evidence that uniforms affected behavior or achievement.

Behling concluded that both teachers and students believe uniformed students are better behaved and more academically successful than students who do not wear uniforms. The fashions most favorably perceived by teachers and students were described as "preppy"—slacks, a button-down shirt, and a jacket or sweater for boys, and a similarly traditional style for girls. She found that "jeans, particularly if they are old beat-up jeans, are perceived in a very bad light by teachers in all our studies."

The halo effect could produce a self-fulfilling prophecy, as teachers and administrators adjust their disciplinary and grading standards to reflect the more positive image of uniformed students. Student behavior, in turn, could actually improve as a consequence of increased self-esteem and a greater willingness to attend a school where they feel valued—effects that the students, too, might attribute to the new uniforms.

Behling's findings have led her to become a "strong proponent of uniforms." She feels that the ability of uniforms to create a more positive perception of students regardless of their other physical traits can result in more equitable treatment by teachers and administrators. Not everyone agrees. Alfie Kohn, author of several books on educational psychology, maintains that teacher prejudice "is a problem that has to be addressed directly by working with teachers to confront the stereotypes they hold. Uniforms seem to be a way of circumventing, rather than solving, a problem. A teacher who treats students differently based on what they are wearing is a teacher who may bring to bear other equally irrational and counterproductive assumptions about gender and race."

To some educators, Kohn's objections are beside the point. They argue that even superficial changes in school climate and in teachers' expectations of students are better than nothing, and can provide a base on which more substantial reforms can be implemented.

Other objections to school uniforms have focused on their cost and the infringement of students' freedom of expression. Objections based on cost are usually overcome by providing low-cost or free uniforms to families that can't afford them. Most schools estimate that uniforms actually cost much less than the expensive footwear and jackets now in vogue among the nation's young.

Uniform proponents tend to dismiss self-expression as an issue. "I love to see variety expressed in dress, food, what-have-you," says Behling. "But I don't know that school is the place to do this." Superintendent Cohn of Long Beach points out that "schools have the kids about six hours a day. They have a lot of time in which to explore their individuality. Gangs and other negative peer groups also impose uniformity, and take freedom and individuality away from kids. Uniforms go a long way toward providing a neutral coat of arms for children whose clothing might otherwise make them targets. A uniform, if it provides a safe passage to and from school, is liberating."

Concealing the Truth

Alfie Kohn admits that the possibility that students' lives are saved by uni-

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forms is a compelling argument. He says, however, that this claim has not been documented by research. And he believes that a better way to address issues of violence and safety is to engage students in thinking through the problem.

"Students are going to be better able to make decisions in life, to be participating members in a democracy, and to survive in perilous neighborhoods if they have been given the skills to make decisions and reach solutions," says Kohn. "Making students wear uniforms does not provide them with the resources they need to make their way through difficult places in difficult times." He also believes that uniforms conceal from students important truths about inequities of class and race, problems that may never be solved if we pretend they do not exist.

Even proponents of uniforms see some dangers. Dorothy Behling feels that teacher perceptions of clothing styles can create serious inequities in schools with voluntary uniform programs. There may be evidence for this in California, where state law forbids compulsory wearing of school uniforms. Some accounts indicate that students who "opt out" of uniform programs are reported for disciplinary infractions at much higher rates than uniformed students. At the Parkridge School for the Arts in Corona, for example, students who decline to wear the school uniform are referred to the office at a rate 22 times that of uniformed students.

It is difficult to predict how long uniforms will remain in vogue. "I've been amazed at how much interest this gets," says Howard Sloane, senior fellow at the Cambridge Center for Behavioral Studies. "There are far more important educational issues. People are looking for easy solutions for difficult educational problems."

Many schools report that teacher, student, and parent interest in uniforms fades after a few years—perhaps as the luster of the new wears off, the expectations of long-term impact fail to be realized, and perceptions readjust and refocus on student attributes other than clothing. Even Superintendent Cohn reminds us that his district's experiment with uniforms is only one reflection of its search for higher standards, which encompasses goals of proven value, particularly parent and community support of and involvement in the schools. Only research and time will reveal whether school uniforms will be remembered as a valuable educational innovation or simply another chapter in the old story of the emperor's new clothes.

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Marc Posner is a senior research associate at the Education Development Center in Newton, Massachusetts. He does not wear a uniform.

ETHICS

Five Reasons Students Plagiarize, and What Teachers Can Do About It

Combatting plagiarism means creating more thoughtful assignments, teaching research skills, and giving students confidence in their own voices

BY ELLEN TARLIN

Cheating and plagiarism, by many accounts, have reached epidemic proportions in U.S. schools and colleges. A 1991 poll by Donald McCabe of Rutgers University found that more than 50 percent of the students at the nation's most prestigious universities had cheated during their college careers. Plagiarism, educators agree, begins much earlier—in elementary and middle schools—where students learn to copy from the book in writing reports and "research" papers.

Studies of students' reasons for plagiarizing reveal five basic themes and suggest ways that teachers can help solve the problem.

1. Students—and many teachers—aren't sure what plagiarism is. Doris Dant surveyed 309 freshmen composition students at Brigham Young University in 1986 and found that many did not understand what plagiarism is: 31.5 percent believed that putting ideas in their own words and supplying a bibliography was sufficient documentation; 15.4 percent thought that copying was not plagiarism if they included a bibliography or footnotes; and 5.8 percent of the students had never heard of plagiarism.

The confusion is not limited to students. Many teachers aren't sure, for example, of the rules about copying language from another source. Is it all right to copy four words? One sentence? One unique word or phrase? When do you have to use quotation marks? When do you have to get permission from the original author?

Many students and teachers believe that avoiding plagiarism simply means changing the words of the original source, and are unaware that appropriating someone's ideas without giving credit—even though the language has been changed—is also plagiarism.

Some students and teachers think it is not plagiarism if there is no intent to deceive, unaware that even unintentional plagiarism is a serious offense. "Part of teaching students how to avoid problems," says Stephen Wilhoit of the University of Dayton, "is understanding their reason and acknowledging the differences between intentional and unintentional plagiarism."

2. Students don't think plagiarism is serious. While teachers may assume that it's obvious that plagiarism is wrong, students may need to have the reasons spelled out. Some students don't immediately see the ethical issues involved. Wilhoit recommends discussing hypothetical cases in class, and asking students to talk about what the author could have done differently.

With younger students, teachers can explain the idea of ownership of one's writing. As students mature, they will come to appreciate the notion that, when they copy someone else's work and pass it off as their own, they aren't learning. They should also know that society regards plagiarism as a grievous offense; teachers can tell them how Senator Joseph Biden of Delaware had to withdraw from the presidential race in 1987 because he had plagiarized parts of a speech, or how a columnist for the *Chicago Sun-Times* was fired in 1990 after plagiarizing two stories.

Students don't take plagiarism seriously in part because it frequently goes undetected and unpunished. Often teachers have no evidence other than a hunch that a student's work is not original, leaving them afraid to accuse students.

The solution to this problem is not to make accusations based on vague suspicions, but to change the nature of assignments so that they are less likely to elicit plagiarized work (see no. 4, below). Moreover, every school should have a clearly written policy on what plagiarism is and what teachers should do when they suspect it has occurred.

Understanding the seriousness of plagiarism is a particular problem for non-native English speakers, according to Lenora Thompson and Portia Williams of the University of Illinois, Urbana-Champaign. Many of these students, they say, have been taught that appropriating the words of others without proper citations is not only acceptable but is expected by teachers of English. "In some Asian cultures," they write, "students are taught to memorize and copy well-respected authors and leaders in their societies to show intelligence and good judgment in their writing. This is particularly true of our Chinese students, who have frequently defended this difference in class."

3. Students feel inadequate. Faced with having to write a research paper, a student may try to put an authority's ideas into his own words—but, finding that his words don't sound so good, he resorts to copying. Many students' reasons for such plagiarism stem from feelings of inadequacy.

"Having been taught that the ideas of others are preferable to their own," says Elaine Whitaker of the University of Alabama, "students subscribe to the notion that the essay is a crazy quilt of quotations in which the acquisition of authorities is the primary task."

Teachers sometimes compound the problem by unwittingly giving higher grades for plagiarized work. It's hard not to respond positively when muddled, immature language suddenly becomes clear, but this rewards students for plagiarizing and confirms that their words and ideas in fact *aren't* as good as those of authorities.

Many teachers are unaware that appropriating ideas without giving credit is also plagiarism.

Teachers should support and encourage students by leavening criticism with positive comments and by stressing self-expression in students' writing, helping them learn to believe in the legitimacy of their own voices.

4. Vague, uninteresting assignments set students up to plagiarize. When a teacher asks students to write a report on elephants, for example, the kids run straight to the encyclopedia where they all too easily find a collection of relevant facts. How can teachers expect students to have their own knowledge about elephants? New CD-ROM technology makes it even easier for students to simply copy from the electronic encyclopedia and paste it into their reports.

The solution is to focus assignments so the student sets the context. For example, instead of asking for a report on "pollution," ask students to write about three ways that pollution has affected their lives. This forces the student not only to research and understand the topic, but also to synthesize that information with her own thoughts and experiences. Many teachers find "what if" questions useful in designing such assignments.

One way to make plagiarism nearly impossible is to insist that students demonstrate their knowledge of a subject by answering questions about it, not just turning in an assignment. The idea of student exhibitions developed by the Coalition of Essential Schools is one example. As the culmination of their project work, students must present their ideas to an audience of teachers and community members, who then question the students closely. Those who have merely copied, not learned, are soon exposed.

5. Students have faulty research skills. Plagiarism comprises many kinds of errors: poor notetaking skills, incorrect use of quotation marks, failure to footnote paraphrased material, and various other improper uses of sources. Students need to be taught each of these skills as part of the research process.

It begins with notetaking. Laying their notebooks below an open source book, students look back and forth from source to notebook, copying all the while. Or they simply photocopy and highlight. Terry Nienhus of Western Carolina University suggests a notetaking method in which students put their notes out of reach, read the source without taking notes, and stop when they find something they think they can use. After thinking about it, they put the source out of reach and write without looking back at the source.

One way to check for plagiarism is to have students turn in photocopies of source material. Gary Sterling, a teacher in Altadena, California, suggests that students answer this question about any particular passage: "*Who* is making the point? If *you* are making the point and establishing the context of discussion, and if your source materials support and illustrate in a subordinate way, then you're on track.... If a quoted source makes the point and you don't incorporate or elaborate upon it, then you yourself haven't done anything yet."

Mastering research skills is a matter of practice, and teachers need to create practice opportunities for students. This means hours of patient instruction in notetaking, quoting, writing, and documentation. It means discussing plagiarism throughout the school year, not just in one class period. It means rethinking assignments and allowing students to write many drafts of papers so they can revise plagiarized passages. (A corollary of this point is that teachers of writing must have a manageable number of students.) Finally, it means responding appropriately to students' transgressions and letting them know that *their* thinking is what their papers should really be about.

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MISSING CHILDREN

Kidding Ourselves About School Dropout Rates

A crisis in urban schools is being covered up, the author argues, by slippery definitions, inaccurate reporting, and an unwillingness to face reality

BY RICHARD FOSSEY

The U.S. Department of Education and various commentators maintain that school dropout rates have been going down. In fact, there is persuasive evidence that, in some settings at least, dropout rates are higher than is generally acknowledged and that they are going up, not down.

The 1995 edition of the *Digest of Educational Statistics* reported that 10.5 percent of 16-to-24-year-olds are high school dropouts, defined as persons who are neither high school graduates nor enrolled in school. Among blacks, the figure for this age group is slightly higher—12.6 percent. This would be a significant improvement over 20 years ago, when 14.3 percent of 16-to-24-year-olds, and 21 percent of blacks in that age group, were dropouts.

The dropout rate is highest in cities, but urban districts also report declining rates. In 1994, the Council of the Great City Schools (CGCS) reported that annual dropout rates in the central cities had declined over a two-year period from 5.7 percent to 4.9 percent. Later that year, CGCS reported that 90 percent of its members had declining dropout rates.

In general, researchers agree that the dropout problem is under control. Researchers for Sandia National Laboratories concluded in 1993 that the "on-time" graduation rate from traditional high schools has held steady at 75 percent over 30 years.

Disquieting Evidence

At the same time, however, disturbing evidence is emerging that dropout rates may be going up. In Ohio, for example, the on-time graduation rate dropped from 77.2 percent in 1993 to 74.8 percent in 1994. In Florida, the rate fell by 6 points between 1990 and 1995.

At the district level, evidence is spotty, but some urban districts began to experience declining graduation rates during the 1980s. According to a state department of education report, New York City's graduation rate dropped from 60.3 percent in 1971 to 47.8 percent in 1988. In New Orleans, the percentage of ninth-graders who graduated with their classmates dropped from 66 percent in 1973 to 46 percent two decades later. According to a recent newspaper report, Los Angeles's graduation rates have been declining over a 15-year period beginning in the early 1980s.

How is it possible that the reported dropout rates are going down while graduation rates are falling or, at best, holding steady? Part of the explanation is that some students who fail to graduate on time eventually do get a high school credential, such as a GED. Some districts have cut dropout rates by offering alternative programs for at-risk students, including 13th- and 14th-year enrollment options. These alternative programs are a positive development, in part because they recognize the fact that some young people require more time than others to complete the work of earning a diploma.

At the same time, there is no question that dropout reporting procedures are flawed in many school districts, resulting in inaccurate figures. In 1987 Margaret LeCompte and Stephen Goebel pointed out that dropout data were biased and skewed because of the way school districts collected and maintained them.

Some districts' reported dropout rates are wildly improbable. In 1993, for example, a Louisiana school district of 29,000 students calculated its annual dropout rate at two-tenths of one percent—only 22 students in grades 7 through 12 had dropped out of school. Since 37 percent of a cohort of ninth-graders failed to graduate on time that year, the district's report was surely wrong. The following year, the reported rate had declined to nearly zero—only two students dropped out, the district said.

A close examination of the Council of the Great City Schools dropout analysis renders it questionable as well. In 1994, the Council reported that 90 percent of its member districts experienced a one-year decline in their four-year dropout rates. However, the CGCS figures included complete data on only about half its members, and several of the nonreporting districts are known to have extremely high dropout rates.

For example, the CGCS report contained no four-year dropout rate for the District of Columbia schools, which had an on-time graduation rate of only 45 percent in 1991, lower than any state. The CGCS reported no dropout information for Detroit or New Orleans, or for Philadelphia, which has an on-time completion rate of less than 50 percent, according to a *New York Times* report.

Wide variations in the way dropout information is collected make it difficult to determine the truth. In the 1994 CGCS report, Chicago calculated its four-year dropout rate at 45.2 percent, New York City reported a 15.4 percent rate, and Buffalo announced a figure of only 4.3 percent. All three districts have similar demographics—high percentages of minority children and children living in poverty. No one seriously believes that Chicago's dropout rate is three times higher than New York's or that the Buffalo rate is less than one-tenth of Chicago's. These variations must be the result of differing definitions and measurement techniques.

Embarrassed by the Truth

We would not tolerate this confusion if it were money, not children, being counted. Most school districts adhere to standard accounting practices in managing their fiscal affairs. When money disappears and the malfeasance is discovered, people go to jail. Why then aren't we doing a better job of tracking students?

Embarrassment may be one reason. Dropout rates in the large urban districts are higher than many educators want to admit. Some districts have constructed obscure dropout definitions and measurement techniques that hide the fact that large numbers of students fail to graduate on time.

Unrealistic accountability standards may also contribute to the problem. State legislatures and school boards set lofty goals with arbitrary deadlines for raising student test scores, improving attendance, or lowering dropout rates. In many cases, these deadlines are impossible to meet, and school leaders may tinker with measurement techniques or the definitions of student outcomes in order to improve otherwise bleak results.

Finally, some districts, particularly in hard-pressed urban systems, may unconsciously be engaging in triage. Overwhelmed by large numbers of at-risk students, educators may simply be concentrating on the ones they think will most likely be successful. Schools may allow marginal students to quietly slip away, or they may encourage some students to leave through suspensions, expulsions, and grade retention.

There are at least four reasons why we need better information about graduation rates.

1. *Assessing the effect of increased spending.* Accurate dropout information is useful for judging whether we are using resources wisely. According to a recent study by the Economic Policy Institute (EPI), real dollar spending increased an average of 61 percent in nine representative school districts during the period 1967 to 1991. In Los Angeles, real spending increased 65 percent; in Baton Rouge, 53 percent.

We would not tolerate this confusion if it were money, not children, being counted.

The EPI report suggested that U.S. school districts have made modest increases in education spending over a quarter century and modest progress in improving student outcomes. A look at long-term graduation rates in the cities that EPI studied, however, might have altered that conclusion. In Los Angeles, graduation rates dropped from 63 percent to 52 percent from 1980 to 1990. In Baton Rouge, between 1967 and 1991, on-time graduation rates fell from 73 percent to 62 percent.

2. *Comparing school districts' performance.* The Rochester City Schools began a nationally publicized initiative in shared decision-making in the late 1980s. It would be useful to know whether these reforms reduced the district's dropout rate compared to other urban districts with similar populations.

According to the CGCS, Rochester's annual dropout rate was 7.9 percent in 1993, considerably higher than New York City's 4.6 percent and Buffalo's 4.5 percent. But these numbers are almost certainly wrong, and comparing Rochester's dropout rate with Buffalo's and New York City's is a waste of time.

Moreover, unreliable dropout data affect our ability to interpret student achievement data accurately. If we don't know the true proportion of students who are excluded from the testing pool, we can't compare results from district to district.

3. *Identifying crisis communities.* Inaccurate reports keep us from identifying school systems where dropout rates are high, lulling us into believing that schools are doing better than they actually are. Particularly disturbing is the disparity between the dropout rates that urban districts acknowledge and the rates published by news media and other outside sources.

4. *Informing the policy debate.* Inaccurate dropout data are not credible and thus are easily discounted in exchanges about the condition of the schools. While some commentators maintain that the schools are in crisis, others like David Berliner and Bruce Biddle argue that the so-called crisis has been manufactured for political purposes. Sorting out the truth requires accurate data.

What Needs to Be Done

We need a single, easily understood, reliable indicator of student attrition that would allow us to compare school districts in different states.

A good start has been made. Beginning in 1992, states have been reporting school-district level dropout information to the National Center for Educational Statistics (NCES). Forty-three states provided dropout information for the 1991-92 school year, and 14 of those states complied sufficiently with NCES guidelines that their dropout data could be compared.

Even if every state complied, however, it wouldn't be good enough. The NCES data are based on districts' self-reporting, which we know is often unreliable. Moreover, NCES reports the percentage of students in grades 7 through 12 who drop out in a given year. This is useful, but we also need to know the graduation rates for specific groups of students.

A cohort dropout rate would measure the percentage of each district's ninth-graders who graduate on time from high school. Such a measure has two attractions. First, it is difficult to manipulate, since the number of ninth-graders and high school graduates is easily verifiable. Second, it gives a clear picture of a ninth-grader's chance of graduating on time in a particular district.

The cohort dropout rate has some drawbacks. Some students who leave school between ninth grade and graduation are not dropouts; they may transfer to other school systems or enlist in vocational programs. Counting such students as dropouts overstates the attrition rate, at least when the students who transfer out of a school system outnumber the ones who transfer in.

Nevertheless, a cohort rate is a rough calculation of a student's chance of being successful in a particular district. An adjustment could easily be made for students who transfer. As for students who enter GED programs, a district would not be prejudiced if they were counted as dropouts. In fact, they *are* dropouts—at least in the sense that they left a traditional high school program prior to graduation.

African American and Latino children are probably most harmed by inaccurate dropout information. It is in urban systems, where a majority of children of color attend school, that the contrast between published dropout reports and reality is most stark. We are not likely to improve education outcomes for these children until we accurately assess the urban dropout problem and address it as the crisis that it is.

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MULTICULTURAL EDUCATION

'But Indians Aren't Real': What Young Children Learn About Native Americans

Some dearly held practices—like traditional Thanksgiving celebrations—perpetuate stereotypes and reinforce children's perceptions that Native Americans lived only in the past

BY DEBBIE REESE

"Why is your skin brown?" a four-year-old girl asked me one day when I was visiting a preschool in a midwestern city.

"Because I am a Native American," I said. "An Indian person."

To which the little girl confidently replied, "But Indians aren't real. They're dead!"

While conducting research several months later in the same city, I asked an undergraduate student to recall what he had learned about Native Americans while in school, and to talk about his first meeting with a Native American. He remembered re-enacting the First Thanksgiving in grade school, with everyone in the class dressing up as either a Pilgrim or an Indian. He remembered learning, in high school, that most of what he had been taught about Native Americans was not true. Finally, he talked about his first meeting with a living Indian: "He was wearing a baseball cap, and he was just a guy! And his skin wasn't even red."

These episodes tell us much about what and how children learn about Native Americans. Many young children believe that Native Americans were savage creatures (the negative stereotype), or romanticized protectors of the earth (the positive stereotype) who wore feathered headdresses, fringed buckskin clothes, or loincloths, carried bows, arrows, and tomahawks wherever they went, lived in teepees, and all had black hair and dark skin.

Peter Pan and Pocahontas

These misconceptions are frequently observed by elementary school teachers when they begin instruction about Native American people, Denise Shaffer reports. Children absorb these ideas from movies, television, children's literature, toys, Thanksgiving greeting cards, and grocery store posters, all of which portray Native American people in the remote past.

Both the positive and negative stereotypes are found in Disney's animated children's films. The Indians in *Peter Pan* are savages who threaten the lives of the lost boys, while the Indians in *Pocahontas* believe that "every rock and every creature has a life, has a spirit, has a name."

Richard Scarry's books often include illustrations of animals dressed as Indians. In Mercer Mayer's alphabet book, alligators wear feathers and fringed clothing on the "I is for Indian" page. The 1992 best-seller *Brother Eagle, Sister Sky* contains the text of a speech delivered in 1854 by Chief Seattle of a northwestern coast tribe; the accompanying illustrations show an Indian wearing a feathered headdress and fringed clothes instead of the clothing worn by native people of the northwest coast.

Once children enter elementary school, teachers become an influence on their conceptions of Native Americans. Thanksgiving remains the chosen time of year to teach about Native Americans in most schools. Social studies books for kindergarten and first-grade children typically introduce Native Americans in a historical context as the "first Americans," who shared a meal with the Pilgrims at the "first Thanksgiving." In these books, the descriptions of Native Americans are all in the past tense. One page invites chil-

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dren to point to the illustrations of people who lived in the past (Native Americans) and those who live today (pictures of modern families), clearly implying that Native American people do not live today.

Thus children learn that Native Americans were all alike, and that they are extinct. Once the children get to school, most teachers unintentionally reinforce those misconceptions by teaching about Native Americans as they existed in the past.

A Rainbow of Cultures

As a parent, teacher, and Pueblo Indian woman, I suggest that teachers present young children with contemporary information about Native Americans. Even knowing which term to use when teaching about the indigenous people of North America often stumps teachers. The Chippewa-Ottawa author and lecturer George Russell writes that the current term of choice is "Native American," unless you can specify the tribe to which you are referring.

Granted United States citizenship in 1924, Native Americans currently make up less than one percent of the total U.S. population, but represent half of the total number of languages and cultures found here. Thus, the term "Native American" covers not just one group of people but more than 500 different groups. In the 1990 census, 1,959,000 people claimed American Indian status, with more than half living in Oklahoma, California, Arizona, New Mexico, Alaska, and Washington. As such, they reflect great diversity of geographic location, language, socioeconomic condition, school experience, and retention of traditional spiritual and cultural practices. Moreover, intertribal and interracial marriages have resulted in light-skinned, fair-haired Native American people.

Regardless of these facts, many of the materials available from educational supply sources do not reflect this diversity, tending instead to homogenize disparate characteristics from a range of tribes and present this conglomeration as "Native American." Catalogues that offer bulletin board materials, worksheets, and ideas for classroom activities frequently depict the Native American as a cute cartoon wearing feathers and fringe.

Teachers of young children who want to present a more accurate picture of Native Americans in their classrooms should first educate themselves, learning all they can about specific tribal groups. Patricia Ramsey suggests that teachers begin by recognizing and analyzing their own beliefs about other cultures. The presence of stereotypes is not always obvious to the untrained eye. Teachers should also be willing to abandon dearly held practices—like traditional Thanksgiving observances—when those practices perpetuate stereotypes and false ideas about people and their cultures.

Debbie Reese, a doctoral student in early childhood education at the University of Illinois, gives workshops on Native American children's literature. For a free copy of her ERIC Digest, "Teaching Young Children About Native Americans," call the ERIC Clearinghouse on Elementary and Early Childhood Education at 1-800-583-4135.

Resources for Teaching About Native Americans

Teachers of young children can develop meaningful lessons on contemporary Native Americans by preparing an accurate, culturally specific unit about a single tribe. For example, Pueblo Indian homes are frequently made of clay adobe; traditional clothes are made of wool and deerskin; traditional headdresses resemble eagle, buffalo, and deer heads; and traditional foods include deer meat, corn, beans, and squash. The following books contain photographs of contemporary Pueblo Indian children engaged in daily activities such as playing basketball and riding bicycles, as well as participating in traditional Pueblo Indian activities: *Pueblo Storyteller* by Diane Hoyt-Goldsmith, *Pueblo Boy: Growing Up in Two Worlds* by Marcia Keegan, and *Children of Clay* by Rina Swentzell.

Esther Stutzman, an Indian educator, suggests obtaining posters that show Native American children in contemporary contexts. With older children, another option is to critique a Thanksgiving image depicting the traditional, stereotyped Pilgrim and Indian figures. Take care to select one that most children are familiar with, like the kind on grocery bags, holiday greeting cards, and so on. Analyze the picture. Has the artist combined attributes of many different tribes into one general, inaccurate image?

Louise Derman-Sparks suggests using "persona" dolls (with different skin colors) in the classroom. Dress them in the same clothing children in the United States wear most of the time (T-shirts, jeans) and bring out special clothing (for Pueblo girls, for example, manta, shawl, moccasins, turquoise jewelry) only on special days. When discussing cultural artifacts like clothing, housing structures, or traditional foods, be specific about which tribe or tribes use these particular items. The Plains tribes use feathered headdresses, for example, but others do not.

Internet resources include Naomi Caldwell-Wood's and Lisa Mitten's article, "I Is Not for Indian," with a bibliography and guide for selecting materials about Native Americans; it is accessible on the World Wide Web at http://earth.library.pitt.edu/~lmitten/ailabib.htm. Another home page maintained by Mitten, http://earth.library.pitt.edu/~lmitten/indians.html, includes links to websites of Native American nations, organizations, businesses, journals, and newspapers.

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—DEBBIE REESE

The Harvard Education Letter

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LEADERSHIP AND CHANGE

Idealists and Cynics: The Micropolitics of Systemic School Reform

Research on what happens inside schools attempting to make radical changes suggests that the true believers and the skeptics have a lot in common

By Edward Miller

What makes school reform on a large scale so difficult? This may be the central question vexing education theorists and policymakers today. Optimistic visions of remaking America's schools have given way to the sober recognition that systemic reform—changing what goes on in classrooms across districts, states, and the country as a whole—is much harder than anyone imagined it would be.

"A significant body of circumstantial evidence points to a deep, systemic incapacity of U.S. schools, and the practitioners who work in them, to develop, incorporate, and extend new ideas about teaching and learning in anything but a small fraction of schools and classrooms," says Richard Elmore of Harvard's Graduate School of Education. "Innovations that require large changes in the core of educational practice seldom penetrate more than a fraction of schools, and seldom last for very long when they do."

INSIDE: The Lessons of Systemic Reform

A Conversation with Ted Sizer

The Disheartening Work Of School Reform

A Familiar Pattern

Researchers note an all-too-familiar pattern in the history of ambitious reform efforts. Blueprints for change are created, built on core principles that will drive the systematic rethinking of educational policies and practices. The package is sold to educators, who must turn the theory into reality, sometimes with the financial and moral support of foundations or government agencies, sometimes with nothing but the threat of sanctions to spur them on.

Some schools are truly transformed, and these exemplars are held up as models for others to replicate. In the last decade, great enthusiasm and hope were generated by reformers like Yale University's James Comer and his School Development Project, Stanford University's Henry Levin and his Accelerated Schools Project, and Theodore Sizer's Coalition of Essential Schools. But the problem of "scaling up"—of translating the successful practices of a few exemplary models into the widespread adoption of those practices—has never been solved.

"Most reform efforts are too generic and trivial and don't penetrate the culture of the school enough to make a difference in the classroom," says Bill Honig, director of the Center for Systemic School Reform at San Francisco State University. "Evaluations of Comer's, Levin's, and Sizer's efforts show that only a few schools have made significant improvements." Sizer himself admits that his greatest disappointment in 12 years of work with the Coalition of Essential Schools is "how few schools have been able to break through."

The problem of "scaling up" promising models of reform has never been solved.

"Reformers believe that their innovations will change schools," wrote David Tyack and William Tobin of Stanford in a recent analysis, "but it is important to

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recognize that schools change reforms. Over and over again teachers have selectively implemented and altered reforms."

Tyack and Tobin argue that such mutations ought to be regarded as potentially valuable—that "reforms might be designed to be hybridized according to local needs and knowledge." But doing this work is not easy, they warn. It requires "reaching beyond a cadre of committed reformers to involve the public in a broad commitment to change. This would require not only questioning what is taken for granted but also preserving what is valuable in existing practice."

In practice, selective implementation often waters down and trivializes ambitious reforms at the individual school level. Elmore observes that this happens in part because of the "perverse incentives" built into most school reform movements.

"These reforms typically begin with a few teachers in a building and nurture a distinctive identity among those teachers," says Elmore, "or they construct a new school from scratch and recruit teachers who are highly motivated to join the faculty. Both strategies guarantee the isolation of the small fraction of teachers who are willing to engage in change from the majority who find it an intimidating and threatening prospect, and are likely to instigate a conflict between the two groups of teachers that renders the scaling up of this reform highly unlikely."

The Four Factions

Few researchers have shed much light on the dynamics of such intrafaculty conflict. An exception is Robert Hampel of the University of Delaware. He spent four years studying ten schools engaged in a systemic reform effort called RE:Learning—a collaboration between Sizer's Coalition of Essential Schools and the Education Commission of the States. "The splintering and divisiveness within the sites," he reports, "was as unmistakable as it was unanticipated."

While Elmore talks about conflict between two groups of teachers—those "willing to engage in change" and those who are threatened by change—Hampel discovered that four factions typically emerged in each school: the leaders, or "vanguard"; the "yes, but" people; the sleepy people; and the cynics.

The leaders—never more than 25 percent of the faculty—were the idealists and activists, ready to put in long hours organizing meetings, chairing committees, writing newsletters, and exploring ideas like cooperative learning and heterogeneous grouping. Hampel found that the vanguard attracted teachers in their mid-30s to mid-40s, "for whom RE:Learning was a midcareer jolt of energy." It also attracted three times as many women as men.

The "yes, but" teachers needed to be reassured that Sizer was not an out-of-touch Ivy League professor.

Most of the teachers in this faction were well regarded by the rest of the staff, but some came off as "self-righteous and preachy." The most vocal, says Hampel, "appeared more interested in discussion than action, or they conditioned action on an ideological purity without which any change seemed tainted."

The "yes, but" group was the largest. These teachers were cautiously supportive of reform and admired Sizer's philosophy, but wanted hard evidence that the ideas would work. "For these teachers," says Hampel, "conversation was not enough. They liked to travel to other sites to be reassured that Sizer was not an out-of-touch Ivy League professor, and that RE:Learning would not fizzle after a few years."

The sleepy people were mostly men, often close to retirement. They avoided extra work whenever possible, wouldn't read Sizer's books, and said nothing at faculty meetings, but would reveal their distaste for the new ideas by body language and lunchroom complaints. "Frequently, they disparaged students as undisciplined and unmotivated," says Hampel, "blaming everything on a sad decline from better conditions decades ago when they started teaching. Their appetite and capacity for either critical self-scrutiny or collaboration seemed very modest."

The cynics were the outspoken opponents, raising uncomfortable questions at faculty meetings about the equity and effectiveness of the proposed changes. "They deeply resented what they considered preferential treatment of the vanguard," says Hampel, "whom they felt inflated claims of their successes without any hard data to show the world."

Hampel observed that, while the vanguard and the cynics at first appeared to be at opposite ends of the spectrum, the two groups really had much in common. "They often shared an abundance of energy and intelligence," he says. "Each had to be bold and smart enough to take strong public stands on RE:Learning." Cynics, he found, had often been members of the vanguard 10 or 20 years earlier, for that era's big reform movement. "Sometimes they still believed that was the way to go," he says, "or they mistrusted any pilot project after past disappointments." One superintendent in Hampel's study remarked that "maybe the cynics are idealists turned inside out."

Hampel notes that the cynics' perspective was potentially valuable. Their candor was refreshing compared with the vacillations of the "yes-but" people and the lethargy of the sleepy. But the leaders usually underestimated the possibilities for recruiting cynics to their cause. "It was too tempting to disparage or avoid [them]," says Hampel, "especially when they were burnt-out or angry human beings, and to assume that none of their observations made sense."

Squashing the Questioner

Although virtually every school reform theorist emphasizes the importance of winning over the skeptics and cynics who resist change, educational

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research is almost completely silent on the question of how to do it. Sizer describes the challenge trenchantly (see "The Disheartening Work of School Reform," page 6), but gives no prescription for success. Elmore's analysis is on target, but his proposals for tackling the problem by "developing structures" and "creating processes" are vague policy recommendations that offer little practical help to school leaders.

One must look outside the field of education research for powerful new ideas about what is fundamentally a problem of leadership. Ronald Heifetz, a psychiatrist who studies leadership at Harvard's Kennedy School of Government, argues that the cynics and troublemakers (whom he calls "deviants") can become indispensable partners in the work of systemic change if they are able to exercise "leadership without authority"—that is, if their voices are not silenced by those who don't want to hear what they have to say.

"Those who lead from senior positions must protect voices of leadership without authority," says Heifetz. "Yet how can a person in authority recognize these voices? I suggest a counterintuitive rule of thumb. Because the pressures on authority are to restore equilibrium, one's emotional impulse will often be to squash those in the community who raise disturbing questions. Consequently, an authority should protect those whom he wants to silence."

Getting teachers to change the way they work is much more difficult than anyone thought it would be. Heifetz helps us understand why. "Adaptive work often demands loss," he explains. "Even a bright new innovation will meet resistance from those that feel threatened." That resistance, he says, is not an obstacle to be overcome but a signal of opportunity—the opportunity to face the severe stresses of adaptive work and the pain of loss that accompanies all fundamental growth and change in human endeavors.

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HORACE'S HINDSIGHT

Hard-Won Lessons from the School Reform Battle: A Conversation with Ted Sizer

Looking back on 12 years of working for change with the Coalition of Essential Schools, the dean of American reformers finds reason for hope

Theodore Sizer retired on July 1 as University Professor and director of the Annenberg Institute for School Reform at Brown University. He retains the title of chairman of the Coalition of Essential Schools, which he founded in 1984, and will spend his time visiting schools, writing, and speaking out on reform issues. Sizer previously served as dean of the Harvard Graduate School of Education, headmaster at Phillips Academy, Andover, and director of A Study of High Schools. His books include Horace's Compromise, Horace's School, *and his latest,* Horace's Hope, What Works for the American High School, *to be published in September by Houghton Mifflin. He was interviewed for the* Harvard Education Letter *by Edward Miller.*

HEL: What matters most in what schools teach children? That is, what is school really for?

Sizer: School is for what young people do when no one is looking. I care about the social studies hot shot with high test scores who in fact bothers to vote and votes in an informed way. I have no interest in the kid who gets a 5 on the U.S. History A.P. but never votes in an informed way or reads a newspaper.

HEL: Are there tests to measure these things that matter most?

Sizer: Our current predominant form of testing is extremely time bound and thus unrealistic. Show me the serious business or military organization or college faculty that makes its personnel judgments on the basis of time-driven paper-and-pencil tests. There isn't one. Only the schools are subjected to that formula.

In business, you care about persistence, imagination, being informed. But even more you care about being able to get informed when you don't know something. We measure that slowly, over time, on the basis of the individual's performance.

You can learn more about a kid's mind by looking at a serious piece of that kid's work and then talking with him about it than from any test. It is no surprise that most of the test scores appear not to correlate with anything except other scores. We're driven by a system of assessment that doesn't assess what we care about.

But admitting that fact is too painful for most people. Very few even ask what the correlations are. When we hear that test scores are up, how many people ask, "Which tests?" How many have in fact looked at those tests?

HEL: Your new book is a distillation of what you've found out in the last 12 years about trying to change schools, and trying to start new schools from scratch with a new set of ideas. What things do you say now that you would not have said in 1984?

Sizer: I say now that it's a lot more than just getting the numbers down—that is, reducing the number of students per teacher. I say a lot more about the culture of the school. I say a lot more about the seemingly intractable form of public school governance. I have less patience with it now. Maybe that's the wrong word. I am more convinced that it is fundamentally flawed, and a few good men and women trying to do the right thing won't succeed.

I've watched too many good people in too many districts come in as the new superintendent—the answer to the prayer, the man on the white horse. Three years later they're out on their ear and the next one is brought in. Now this one is going to get it right. And then the next one, and then the next one.

It's not that these are bad people. In New York City alone, I've seen two good friends killed by the job of being chancellor: Calvin Gross in the 1960s, who was effectively destroyed by the job of being then superintendent, and Richard Green, an old friend, who ostensibly died of asthma.

School is for what young people do when no one is looking.

So I'm more pessimistic about the system, and more convinced that we've got to change it.

HEL: What has been your biggest personal disappointment in those 12 years?

Sizer: How few schools have been able to break through, relatively speaking. I was aware that it would be hard, but I was not aware of how hard it would be, how weak the incentives would be, how fierce the opposition would be, often in the form of neglect.

But there still are the schools that break through. It can be done.

HEL: One phrase from your book: "The typical routines of high schools defy logic and experience, yet are exceedingly difficult to change." Is that a fundamental truth that has emerged for you?

Sizer: Absolutely a fundamental truth. I have never met a high school principal who said that a serious class in Spanish should be interrupted, but I watch the same principal turn on the P.A. system and interrupt it.

HEL: You like to say that tracking is fine as long as you have one track for every kid. Some small schools seem to be able to do that, but is it possible in a typical large American high school?

Sizer: It's not possible, because the faculty can't know the kids well enough to make the adjustments that need to be made. There may be reasons why a kid isn't doing well in math that have less to do with math than with something else. Unless you know what that something else is you can't really help him. There's no point in just dropping him back into the "bluebird" section.

Good schools are very flexible, because kids are infinitely changeable.

HEL: You write at some length about the problem of change in wealthier communities that are generally thought to have good schools, and yet where kids are just sitting there marking time, totally disengaged, not doing any real intellectual work. When you challenge the old ways of doing things you encounter fierce opposition.

Sizer: The ferocity of the opposition often reassures me that I'm on the right track. Art Powell, Eleanor Farrar, and David Cohen really lay this out in *The Shopping Mall High School,* in that devastating chapter they call "The Unspecial Majority." A lot of the high-ranked school's reputation turns on 10 percent of the kids. If you went into a school and, instead of saying, "Show me the work of your best kids," you said, "Show me the work of every seventh kid, going down the alphabet," you'd get a very different view of that school.

We operate under the illusion that everybody has all the opportunities offered to the fanciest children.

HEL: Why is it so difficult to get schools to change?

Sizer: The momentum of tradition is very powerful. The symbolic importance of the high school career is very important to Americans, and they don't mess with it lightly. And the incentives for serious change are so incredibly weak.

HEL: What kind of incentives do we need?

Sizer: The most important incentives are for the kids. That's where you start. I've been delighted at the way using exhibitions has emerged in good schools. Not only does it force the faculty to think hard about what kids should do and at what standard, but it also provides in its public aspects a positive incentive for most kids. It's like performing in a school play or playing soccer. If you know you're going public and your mom and dad will be there along with some strangers, that changes the nature of the contract between the kid, the teacher, and the ideas.

The ferocity of the opposition often reassures me that I'm on the right track.

But these exhibitions can't be imposed from the outside. That kills it. They have to be creatures of a particular school in a particular place, a particular kid. Otherwise they become ritualized—like the college admissions game, which is now little more than a cynical ritual.

HEL: But when most people talk about incentives, they don't mean student exhibitions.

Sizer: No, they're not talking about kids. The whole point is to get the kids to want to do this hard work. You don't do that by threatening them. And you certainly don't do it by giving them tests that are inadequate on their face, and which you drill for and then forget. The idea that these external tests are objective is just a fantasy.

HEL: "Practice caring rigor," you write, "and rigorous caring." How can caring teachers demand high-quality work when they know that they're putting even more pressure on a kid who's already hurting?

Sizer: That's where those snide comments about "feel-good schools" come from. Like many snide comments, there's a lot of truth in them.

Again, this is why external exhibitions are so important. I'm a floundering kid and you're my teacher and you don't want to put me under too much stress because you know that my mother is dying of cancer and my father is in jail. But there is that exhibition coming up in a month.

The example of athletics is good. The basketball coach who says I'm not going to have you practice very hard because it might hurt your psyche is the coach of a losing team.

HEL: Many of the success stories in your new book are about schools that were started from scratch, with a core of smart, dedicated people. The success stories about existing, poor schools that have been transformed into good ones are much rarer. Do we simply have to close down the schools and start new ones?

Sizer: The answer is yes in extreme cases—and there are many extreme cases. But look at Julia Richman High School in Manhattan, which had a dreadful record, even though it had some devoted teachers in it. Chancellor Joe Fernandez shut it down.

Then they cleaned up that wonderful ark of a building and painted it and brought in a very imaginative head custodian, who is a bloody genius. They put six small schools into that building. You walk into that school now and the difference in the feel is astonishing, particularly when one contrasts it with James Monroe High School in the South Bronx, which has exactly the same floor plan, the same architecture.

The kids at Julia Richman are the same sorts of kids who were always at Julia Richman, but the sense of hope and determination and friendliness that you feel there now is as night is to day.

What we need to do more in education is listen to the custodians. That particular head custodian—a 40-year veteran of the New York City public schools—painted for me a picture of human-scale schools within a large building that was as exciting and as positive a story as I've ever heard.

New York is not the only district that has done it. The Pacifica School District in the San Francisco Bay Area did the same thing. The heart of it is the gathering of teachers who share fundamental values.

The symbolic importance of high school is very important to Americans. They don't mess with it lightly.

HEL: You write that clusters of schools proceed more effectively than individual schools alone. How did you come to that conclusion?

Sizer: I've learned that in a variety of places. One dimension is political. It's easy to pick off one school at a time if you're a hostile central administration.

Here's a grotesque example:

In one big city school district a new deputy superintendent arrived and noticed that one elementary school had a much larger library than all the others. He inquired why and was told that the principal was aggressive in raising money and buying books. He said, "You can't do that, because the other schools have small libraries." The principal said, "Well, I raised the money." He said, "It doesn't make any difference. You can't have a large library." The principal protested and he fired her.

But that school belonged to a cluster of schools across the city, in different districts, all working together with a full-time coordinator to pursue certain educational commitments. The coordinator had made it her business to know the local press. She got on the phone and the story about the library was on page one within 24 hours. Within another 24 hours, the superintendent reversed the deputy.

So there's political strength in numbers. That's putting the whole thing in a paranoid way. But in the real world you've got to be moderately paranoid.

Another advantage of clusters is in holding each other accountable. If all the schools believe in student exhibitions and portfolios, for example, they commit themselves to sharing them. Now if your school has very sloppy stuff, and my school is really moving, and we compare each other's work, I say to you, "Ed, pull up your socks. It's not good enough." There's a kind of collegial peer pressure, which is the most effective kind of peer pressure.

HEL: Why can't that work among teachers within a single school?

Sizer: Because they have to eat lunch with each other every day. But if you're 2 miles away, or 5 miles away, or 20 miles away, it's different.

Why can't schools be gathered by educational objectives rather than by geography? Why are districts all geographical? There are wonderful, longstanding examples of schools gathered into districts by educational commitments. The Montessori and Waldorf schools in the private sector, and the great diocesan systems of Catholic schools.

Clever people like Paul Hill at the University of Washington have been talking about charter districts and virtual districts. I think the idea has arrived. I wasn't talking about this at all back in 1984. I was talking about individual schools. I said the Coalition of Essential Schools is about what happens within the four walls of the school. That was a very naive notion.

HEL: You write, in *Horace's Hope*, that "the day of the one best system designed by experts for the mandatory use of all appears mercifully to have passed." If that's so, why are we still talking about "scaling up"?

Sizer: Because there are two kinds of scaling up. When people say, "We've got to scale up," I say, with a twinkle in my eye, "We're already scaling up." We scale up with ideas, we don't scale up with a model. Even though the work is very difficult, the fact is that new schools continue to join us in the Coalition. They're joining up because common sense is infectious. If more and more people take seriously the idea that kids learn in different ways—that's scaling up.

What we need to do more in education is listen to the custodians.

The other kind of so-called scaling up is when people think there's a single design to be implemented. The very language those people use is not only wrong-headed, it's patronizing.

Which brings us back to incentives. You have to think about incentives for the teachers, too. When you say we'll let teachers do anything they want, except we will set the goals, standards, and assessments, that is an absolute joke. You rob them of the very thing that's the heart of schooling.

HEL: Is outside financial support critical for doing this kind of work?

Sizer: Yes, because serious reform requires teacher time, principal time, parent time. That means wise schools overstaff. They don't fly in consultants, squeeze them tight, and then send them on their way. That's the wrong way to spend your money. Instead of 20 teachers you have to have 25 teachers, with 5 of them on in-place sabbaticals

HEL Is on the Web

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HEL: What do you make of researchers who argue that money really doesn't make a difference?

Sizer: It's silly, because they're taking one variable, which is investment. Give me a school with 100 kids, whom I pick, and I'll show you a school that can run quite inexpensively. Show me a school with 1,000 kids whom I don't pick, a third of whom arrive during the year and a third of whom leave during the year, and I'll show you a school that's expensive to run.

It's like so much of the education research. As soon as it's aggregated it ceases to have much meaning. It's about as useful as knowing the average shoe size. Measure all the feet of the soldiers in the Army and then have one size shoe. It's nutty.

HEL: In the end, your book is extremely hopeful about the prospects for improving schools. Why?

Sizer: The inadequacy of the existing system is becoming more and more apparent, and people are beginning to have the courage to talk about it. It comes out in paradoxical forms. For example, people say standardize this and standardize that, and then an hour later the same people talk about choice. Those are contrary policies. These aren't stupid people. It's a measure of the confusion out there, and confusion is the beginning of wisdom. That's the hopeful thing.

HEL: You must feel sometimes a great sense of frustration at the level of public and political discourse about education.

Sizer: And academic discourse.

HEL: How do you keep from being cynical about school reform?

Sizer: I choke it back. I'm cynical over the dinner table. How smart people can be so arrogant about these matters, how they keep missing these points, is very hard to take. What keeps me going is seeing the graduation ceremonies at schools that turn out kids who do what no one thought they could do. Those ceremonies are deeply moving. School *can* make a difference. That helps choke back the cynicism.

HEL: Did you invent Horace Smith, the exhausted and skeptical English teacher in your books, in order to place your own personal frustration and resentment onto another character—so that you wouldn't have to say these things yourself?

Sizer: Of course not. It's all Horace's fault, not mine.

LOUNGE TALK

The Disheartening Work of School Reform

Changing the fundamental rules and assumptions driving the status quo in education is harder than anyone imagined it would be

BY THEODORE R. SIZER

Defining a school's goals and standards is easy work compared with putting them into practice. As chairman of the Coalition of Essential Schools, I recently visited Massey High School (not its real name), a member of the Coalition, and found myself faced with powerful evidence of this truth.

My visit was carefully orchestrated. First I had a chat with the senior administrators, all of us having coffee in mugs decorated with the school logo and motto: *Go Tigers!* The mood was sober, realistic, but still optimistic. A student arrived to show me around. We made brief visits to a few classes, these room-by-room forays serving more to interrupt each lesson than to enlighten me, and ended with an extended session listening to the massed concert band practicing Brahms's Academic Festival Overture.

In the Lunchroom

Luncheon with the faculty followed, in a small lounge off the cafeteria. Teachers came in and out; since their contract with the district had recently been amended to give them a "nonsupervisory lunch break," they got their 20 or 40 minutes (depending on the vagaries of the complex schedule) apart from the students. If they chose, they could spend it eating with their colleagues at small round tables in this oasis far from adolescents.

This school was trying to reshape its work, or as the jargon has it, to restructure. The faculty members had read about the Coalition of Essential Schools and were proceeding with a plan derived from ideas they had gleaned there. The administration had advised them that I would be in the lounge to chat with them and to answer questions.

The conversation was awkward. Most people concentrated first on their bag lunches (few turned to the school cafeteria for their meal). There was talk of the immediate—of a recent basketball game, of a parents' night that had had sparse attendance, of an altercation in the gym, of the push for recognition for a gay and lesbian student organization, of a rash of gang confrontations in the nearby city park.

Some came to my table; others went elsewhere in the room, avoiding conversation. Quickly I sensed that those with me were mostly teachers in the Essential school pilot program. I asked them how they were doing.

They spoke of the difficulties first, then the rewards. The kids did not like the pressure to do more on their own and to present their work publicly, such as (for a U.S. history class) making and defending a case in favor of the 1890 Sherman Anti-Trust Act. Standing up to questions from an audience of teachers and parents was tough for them. They alternately cursed and reveled in the attention the new regimen afforded them. They understood that they were on a new sort of academic hook, and they resented that.

Although the administration supported the new program, the details of school kept getting in the way. The bells rang at inappropriate times. The city computers that scheduled the students (by central office order) were incapable of handling the new Essential school pattern of classes. The second-level district administrative staff did not seem to understand how much freedom the Essential school teams had been promised. Glitches abounded, mostly dealing with the trivial but with untrivial consequences.

Even after a Herculean effort at reaching out, parents still did not seem to appreciate what was going on.

The likelihood of new budget cuts imposed on the district created a pervasive gloom. New state and district mandates kept adding things to cover, threatening to bloat the carefully slimmed-down program designed by the Essential school teams—quartets of teachers from mathematics, science, English, and social studies departments who had been assigned two-and-a-half-hour daily blocks of scheduled class time to work with a common group of 110 ninth-grade students. The state tests rewarded the display of straightforward memory work, not the use of knowledge. If the students were to be judged on the basis of such tests and not more sensible and demanding ones, in what sort of jeopardy did that place the new program?

The Need to Vent

I pondered the basically negative temper of the talk. Why complain to me? To show me how hard the work was? I already knew that, and they knew I knew it. To show me how little support from the top they got? If so, why not be wholly explicit about what had to be done about the matter? The most plausible explanation was frustration and the need to vent. I was a convenient (and, I gathered, rare) audience. Few folks came to listen to these teachers.

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The litany of complaints continued. Even after a Herculean effort by the staff to reach out to families, parents still did not seem really to understand or appreciate what was going on. There were no subject-matter materials that supported the new kinds of teaching and learning. Teaching in teams was unfamiliar and stressful; each teacher was on show for the others. There was no money for relief, no planning time, no real help. Apparently the powers that be believed that reform was to happen merely by fiat—which meant that change was on the teachers' backs. It all was exhausting.

I began to feel dismayed. But then...

And exhilarating too, they said. The kids were coming alive. It was rewarding to know them better, something that was possible with the more focused academic program—a concerted and interconnected program in the four key subjects represented by the teachers. Team teaching helped too, they said; they all had the same kids and could discuss their work daily. The students' performance was better. They showed up. They depend on us, the teachers reported. They take our time, and while this stretches us, it is rewarding too. The kids engage more. It is nice to have colleagues, other teachers in the team on whom to lean from time to time. Some parents see a new energy for school in their children and tell us about it. We are going in the right direction.

A Solitary Calling

All this was familiar. The better the teachers know the students, the more likely it is that the students will take, even demand, their time. Good teaching creates a bottomless hole of student expectations. The kids connect with a teacher and then want more of everything.

The others in the lounge listened in, though they were trying not to show it. My tablemates did not remark on the stresses within the faculty, the jealousies among teachers that the start of restructuring had created. Everyone was polite. I heard of the faculty squabbles only later, from some of my luncheon partners who collared me privately in the hall.

My visit tapered off after the early afternoon classes and the rapid exodus of students to their jobs or, for a few, to athletics. Faculty members also left abruptly; there were two-job folks here. The shabby building was hushed by three o'clock.

The principal offered to take me to the airport, and I accepted. On the way she told me how frustrating it was to combine the endless crush of details of merely keeping school with the new demands of leading a reform effort. She directly criticized few of her school colleagues and district superiors, but she made it clear that she and her handful of eager teachers and parents had been left with paltry extra resources and at the same time a full load of "show me" expectations from the higher-ups. The status quo did not work, she lamented, but the full burden of proof still lay on the shoulders of those who tried to confront it by setting forth work for students that was demonstrably more sensible.

Once again I was an audience. I was reminded of how the job of school reform is a remarkably solitary one unless steps are systematically taken to build colleagueship. This is no surprise: teaching in most high schools is a solitary job—my kids, my classes, and my classroom, with a door to shut—and the principal often is no less isolated. Collective responsibility is honored in most schools only in the breach.

Good teaching creates a bottomless hole of student expectations.

She railed a bit, but at the same time she asserted that she would pursue the reform or quit. She was upbeat as we pulled into the airport, seemingly refreshed by recounting her problems. Her passion when describing what her school might be able to do for kids gave me hope. But the description of the battle, with all its skirmishes and the absence of powerful friends who were stalwartly behind the effort, disheartened me.

Theodore R. Sizer is professor emeritus at Brown University and chairman of the Coalition of Essential Schools. This essay is excerpted from the book Horace's Hope, *published by Houghton Mifflin Company, Boston. Copyright © 1996 by Theodore R. Sizer. Reprinted by permission.*

LETTERS TO THE EDITOR

A Sad State of Affairs

TO THE EDITOR:

It is nonsense to argue, as Barbara Matson does in "Whole Language or Phonics? Teachers and Researchers Find the Middle Ground Most Fertile" [*HEL*, March/April 1996], that the defenses of direct and systematic teaching of reading are "politicized," i.e., are based on political ideology rather than on the findings of empirical research. It is clear in this respect that she is unmindful of the fact that leaders of the whole language movement have proclaimed openly and repeatedly its special, clearly defined political, economic, and social agenda.

Matson's lack of qualifications for analyzing her subject becomes apparent in the manner in which she uncritically accepts information about whole language from unreliable sources. She accepts without question, for example, the spurious claim that the NAEP evidence of whole language's failure in California is invalid because it does not take into account the racial makeup of California students. The reality is that its white students also are the least competent white readers of their age group, according to the 1995 edition of the *Digest of Education Statistics*.

The Matson article is deplorable since it reflects on the intelligence and integrity of Harvard and its Graduate School of Education. If one cannot trust the HGSE to report on critical educational issues in a veracious, balanced, and otherwise trustworthy manner, the reputation of the mightiest university in the nation, if not in the world, is damaged noticeably. A sad state of affairs, indeed.

PATRICK GROFF
SAN DIEGO, CALIFORNIA

The writer is professor emeritus in the School of Teacher Education at San Diego State University.

Irresponsible

TO THE EDITOR:

I don't enjoy being misquoted, in "Whole Language or Phonics?" or having statements misquoted in other articles quoted as if I said them to your writer. *Education Week* is responsible for the misquote about Jeanne Chall's being used by the far right. I certainly didn't say that to your reporter. Nor did I say anything resembling the quote about California's low scores on NAEP reflecting the bias of the testmakers.

Are you aware of the suffering being piled on the heads of California teachers and learners by the politicians and school decision makers responding to media reports on the NAEP test? Do you know that an official of the California State University system has demanded syllabi of all language arts reading faculty and promised the legislature they will be made to teach more phonics to their students? Do you know that 86 percent of California teachers have classes larger than 25 while 100 percent of Texas teachers have less than 25?

I see no value in yet another "phonics vs. whole language" story. Do you consider yourselves playing a responsible role in education when you promulgate the notion that there are two and only two views of how reading should be taught and that somehow mixing phonics drills with whole language produces effective classrooms?

Are you aware of the nature of proposals in Ohio, Texas, Arizona, and California to control what teachers do in their classrooms not only in reading but in math, science, and history? Do you know there is a bill in the California legislature to dismiss certified teachers if they don't complete successfully the required phonics courses?

I don't know why, but I expected more from the *Harvard Education Letter*.

KENNETH S. GOODMAN
TUCSON, ARIZONA

The writer is professor of education at the University of Arizona.

EDITOR'S NOTE: *Professor Goodman was not misquoted. We wrote that "he...says researchers like Chall are being used by those whose agenda is to destroy public education." His exact words to us: "Harvard professors or linguists don't realize they're lining up with Schlafly and G. Gordon Liddy, people whose agenda is to destroy public education." On the question of NAEP scores, Goodman said, "When you get absurd results from a test, you should go back and say, 'What are we doing wrong?'... In the case of reading, the testmakers were obviously influenced by researchers."*

Barbara Matson replies: "It appears that Groff and Goodman have read what they wanted to read into the article, which presented numerous arguments across the spectrum of opinion. I guess I should have used a quote from Betty Dagdigian, a retired professor of reading at the University of Maine. Her first comment on teaching reading was, 'The biggest problem is fanaticism'."

Pahk Ya Cah, Professah?

TO THE EDITOR:

Barbara Matson portrays the phonics versus whole language debate succinctly, lucidly, and cautiously. I have always said to my students that the debate is wrong-headed: phonics practitioners who ignore meaning are wrong, and whole-language advocates who ignore phonics are wrong.

One example in Matson's article, in which "banana" is used to teach the "short a" sound, illustrates the fallacy of some kinds of phonics instruction. "Short a" is found only in the middle syllable, *na*, while the *ba* and the final *na* syllables have the "uh" sound.

As a Texan, I wonder what "phonics experts" would do with my pronunciation of "bye," or "right now, y'hear"; I also wonder how experts would deal with the pronunciation of "park," "car," and "Harvard" in certain dialects of English spoken in New England. (John F. Kennedy could still be understood, and he could read books written in Texas.)

Your article is a splendid example of trying to bring the two camps together, so that we can teach children to read without advocates of one side or the other getting in the way.

CURT HAYES
BOISE, IDAHO

The writer is professor of applied linguistics and education at Boise State University.

Letters to the Editor

We invite readers to comment on the articles in this issue of the *Harvard Education Letter* and on other matters of importance to educators. Address letters to the Editor, *HEL*, 349 Gutman Library, 6 Appian Way, Cambridge, MA 02138. You may also fax letters to 617-496-3584 or send electronic mail via Internet to EdLetter@hugse1.harvard.edu.

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STANDARDS-BASED REFORM

Mathematics and Science Standards: What Do They Offer the Middle Grades?

When used as guides to curriculum and teaching, standards offer a promising tool for improving achievement for all students.

BY ANNE WHEELOCK

For generations, good teachers have designed their curriculum and pedagogy guided by the questions "What do I want my students to know at the end of the year?" and "What do I want my students to be able to do with this knowledge?" These questions are now the centerpiece of academic standards for what all students should know and be able to do in mathematics and science. Standards released by the National Council of Teachers of Mathematics (NCTM) in 1989 and the National Research Council (NRC) of the National Academy of Science in 1996 represent the considered thinking of teachers, mathematicians, and scientists about the essential knowledge and skills that all students need to succeed as learners.

As guides to curriculum and teaching, these standards highlight desired learning on two dimensions: (1) knowledge of the important and enduring concepts in math and science and (2) the cognitive processes that can make sense of that knowledge—that is, thinking skills that enable students to use the facts and concepts in these disciplines to learn for understanding. The developers of these standards envision learning that develops these thinking skills—reasoning, problem-solving, making connections, and communicating—as the context for learning basic skills and facts. They envision classrooms in which students explore the essential questions in the disciplines, with the aim of engaging students in experiencing the disciplines as a set of dynamic ideas rather than as a list of facts.

The goal of these standards for the middle grades is learning and teaching for understanding. As defined by David Perkins and Tina Blythe of the Teaching for Understanding Project at the Harvard University Graduate School of Education, understanding involves "being able to do a variety of thought-demanding things with a topic—like explaining, finding evidence and examples, generalizing, applying, analogizing, and representing the topic in a new way." They emphasize that learning for understanding is what learning must be about for *all* students, not simply a select minority.

Why Pay Attention to Standards?

The standards in math and science are part of the larger standards movement that represents one of the latest efforts to reform schools "systemically" to boost achievement for all students. However, many middle-grades educators find it far from obvious that standards-based reform is desirable or necessary. For some doubters, standards-based reform seems to threaten the student-centered principles of middle-grades education. They worry that standards will standardize curriculum and instruction, militate against individualized instruction based on the needs of the student, and paralyze the growing movement toward interdisciplinary learning. Others suspect that standards will impose "top-down" re-

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form, undermining the professionalism of educators or the autonomy of local school boards and parents. Considering such objections, do standards in mathematics and science hold out any possibility for improving the educational experiences and outcomes for middle-grades students?

The short answer to this question is "Yes!" While no panacea, the standards offer a lens through which middle schools can examine their practices, both to address the unequal access to valued content that plagues many schools and to chart a course for raised expectations and enriched teaching and learning in all classrooms. Moreover, standards can serve as the focal point for restructuring schools to improve achievement for all students in the middle grades.

According to the National Assessment of Educational Progress (NAEP), achievement is stagnating in the very areas emphasized by the standards. For example, NAEP data reveal that in 1992, 78% of all 13-year-olds demonstrated a surface understanding of the four basic math operations and were beginning to develop reasoning skills; at the same time, however, only 19% of the 13-year-olds assessed that year demonstrated numerical reasoning beyond beginning levels or were able to draw from a wide range of mathematical areas, including geometry and algebra. In science, while the majority of students have a rudimentary knowledge of science principles, such as the structure and function of plants and animals, only a few consistently apply basic knowledge to interpret and reason about scientific concepts.

Equalizing Access

If the opportunities to learn laid out in the mathematics and science standards were systemically applied to all middle school classrooms and made available to all students equally, progress could be made on closing the achievement gaps between white and minority students. NAEP data illustrates one of these gaps: while 23% of white 13-year-olds demonstrate moderately complex mathematical procedures and reasoning, only 4% of African American and 7% of Latino 13-year-olds do so.

Unfortunately, disparities in opportunities to learn are dramatic in the middle grades. For example, Jeannie Oakes and her colleagues at RAND found wide variations in students' access to gatekeeping science and mathematics courses. Middle-class students were more likely to be placed in courses that prepared them for advanced learning than their low-income peers. Likewise, Jomills Braddock's analysis of data from the U.S. Department of Education's National Educational Longitudinal Survey (NELS:88) found that African American, Latino, Native American, and low-income eighth graders were more than twice as likely to be in remedial courses than their white or middle-income peers. Analyzing NELS:88 data, Johns Hopkins researchers Joyce Epstein and Douglas MacIver found great variation in eighth graders' access to opportunities to learn science: Students in schools with more advantaged populations had greater access to laboratory work and hands-on activities than students in low-income schools.

> ***Standards can serve as the focal point for restructuring schools to improve achievement for all students.***

As recent research reported by Julia Smith of the University of Rochester highlights, access to valued mathematics knowledge in the middle grades clearly makes a difference to student performance and persistence in the later grades. Using the U.S. Department of Education's High School and Beyond database, Smith found that early algebra-takers were socialized into taking more mathematics over the course of their schooling, resulting in improved achievement. Yet schools enrolling high percentages of poor students are still less likely to offer "high content" courses than those with more advantaged populations. According to NAEP data, 59% of eighth graders in the top-performing third of schools are enrolled in algebra or prealgebra, while only 35% are enrolled in these courses in the bottom-performing third.

Even in schools where math teachers *are* adopting teaching-for-understanding strategies, students are benefiting to different degrees, depending on their "ability-group" placement. For example, analyzing NAEP results for the Educational Testing Service, Richard Coley reports that regardless of their placement, a large majority of eighth graders receive instruction in mathematical facts and concepts and in skills and procedures needed to solve problems. However, while the majority of students in the "top" math groups received a "heavy emphasis" on developing reasoning skills to solve unique problems and on learning how to communicate ideas in mathematics effectively, less than half did so in lower ability groups.

Raised Expectations

The standards for mathematics and science emphasize that cognitive development in early adolescence, including logical thinking and reasoning, does not have to wait for students to "naturally" reach more advanced levels of maturity. Standards for grades 5-8 in both math and science are based on the view that middle-grades students are capable of developing higher order skills. In math, these skills include abstracting more complex meanings and ideas from concrete experiences and using language to clarify thinking and report observations. In science, these skills include recognizing the relationship between explanation and evidence and using background knowledge to design investigations, make observations, and interpret data. Fundamentally, then, math and science standards enlarge the view of what we can expect from all young adolescents. This view is supported by recent findings from cognitive psychologists. For example, Daniel Keating has noted that, contrary to views that a leveling off of brain growth contributes to academic stagnation in early adolescence, middle graders can indeed develop

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logic and reasoning skills when given access to content knowledge. The standards signal that it's time to replace the picture of middle-grades students as captives of "raging hormones" with one of young people fully capable of developing "raging intellects."

Improved Teaching and Learning for All Students

If all young adolescents are to develop higher-order thinking, they need regular opportunities to experience curriculum and instruction that focus on using and applying the knowledge and skills called for in the standards. Analyzing course content through the "standards lens" represents a first step toward closing the gaps between what educators view as essential concepts for learning and what is actually taught. These gaps remain wide in the middle grades. For example, in their report *Reaching Standards: A Progress Report on Mathematics*, researchers from the Policy Information Center of the Educational Testing Service (ETS) note that despite NCTM recommendations, many middle-grades teachers are still emphasizing facts and procedures, with most student work dependent on textbooks and worksheets. Not surprisingly, according to NAEP's 1992 findings, 44% of eighth graders still agreed with the statement that "learning mathematics is mostly memorizing."

As middle school math and science teachers begin to use instruction guided by the standards, they will need access to new curriculum materials that reflect the standards' focus on learning for understanding. In mathematics, Julia Smith argues that to make an impact on both equity and achievement, early algebra learning should be incorporated into an NCTM-standards framework in such a way that challenge is the norm for all students. This is increasingly possible through mathematics curricula that are just now becoming available through such National Science Foundation-funded projects as the Connected Mathematics Project at Michigan State University and the University of Wisconsin's Mathematics in Context Curriculum for Grades 5-8. (See "Content Standards for Science," page 4, for a list of standards-based science curricula.)

Practical Challenges

Implementing these rich curricula, however, raises practical challenges for schools and teachers. Science teachers polled by the National Science Teachers Association emphasize the need for time for planning and meaningful professional development to fully implement the science standards. For example, James Randolph, Science Supervisor for Chattanooga Public Schools, explains that the standards first became "real" to him only when he had a chance to analyze a set of lesson plans with his peers. At first, he says, he thought the plans were "pretty good"; but after critiquing them in relation to the standards, he realized "they were not reaching a very high cognitive level." Randolph notes, "Teachers need to sit down with each other and give each other a critical review of what they're doing in relation to the standards. That's when eyes can be opened, but that takes time."

Using standards to mobilize a variety of reforms appears to be an especially promising strategy for urban schools.

Improved teaching in individual classrooms, however, can have full impact only to the extent that the culture of the whole school conveys that academic achievement is a goal for all students. Thus, while many middle schools have moved to enhance teacher professionalism and student success through such structural innovations as shared decisionmaking, teacher teams, and "add-on" programs for targeted groups of students, these innovations in themselves do not necessarily communicate the message that learning for understanding is what school is really about. Implementing these innovations in tandem with curriculum standards can add to their value.

In a study of 44 schools in 13 districts, Priscilla Wohlstetter and her colleagues at UCLA found that schools that practiced school-based management (SBM) within a context of standards or curriculum frameworks were more successful in implementing classroom reforms in teaching and learning than SBM schools that lacked such a focus. In the more successful schools, standards specified the "what" of the curriculum, leaving the "how" up to the teachers.

Using standards to mobilize a variety of reforms within schools in the service of student achievement appears to be an especially promising strategy for urban schools. For example, analyzing K-8 schools in Chicago, Anthony Bryk and his colleagues found that schools that had adopted a "systemic" approach to reform were more likely to focus on changes in classroom practices and keep attention on changing these practices than schools that simply mobilized extra materials and resources to meet specific student needs. Schools with systemic approaches to change also proved to be twice as hospitable to pedagogy that emphasized in-depth knowledge, conversations about learning, and projects connected to the world beyond school as those schools with more haphazard, fragmented efforts: 64% of the "systemic change" schools reported moderate or extensive use of such learning practices, compared to 31% of schools with unfocused approaches. What's more, schools using a "systemic" approach to reform had often pared away the "add ons" that did not serve the core purposes of achievement-focused teaching and learning.

However visionary they may be, standards by themselves cannot work the magic of school reform. They only set the stage for both harder and smarter work among professionals who want to improve teaching and learning. As NCTM Board of Directors member Francis Fennell notes, "It would be my hope that readers of the Standards are caused to reflect on the mathematics they teach, how they teach it, and how it is assessed. If this would happen, the mission would be accomplished. The Standards (all of them) are guideposts, not blueprints."

Schools that use math and science standards to critique and improve their own curriculum and teaching can enrich the learning that goes on in their schools. Those that act to make learning for understanding the hallmark of each class can increase the odds that all students will have meaningful opportunities to learn, odds that are often unpredictable in schools that lack this focus. Standards are not a cure-all, but the use of math and science standards to rethink how schools distribute opportunities to learn and to shape teaching and learning in every single classroom offers a promising strategy for deeper learning for all students.

RESOURCE MATERIALS

Content Standards for Science

NSF Panel Tells Districts Which Materials Meet Its Standards

All the attention focused on adopting higher content standards in science amounts to little unless high-content resources are available for educators to use. But what criteria exist to determine if a middle-grades textbook series, for example, meets high content standards?

There were no such criteria, officials at the National Science Foundation (NSF) learned. After spending millions of dollars on the development of science programs, many that produced accompanying resource materials, NSF realized that state and local educators had no way of telling if these materials, or any others, met the content standards set by NSF.

Based on that realization, NSF's Instructional Materials Development Program reviewed middle school science programs developed through NSF funding. The program will eventually review all K-12 math/science curricula, but chose to start with the middle grades (grades 5-9) because "there were questions both in the field and at NSF about the availability of quality comprehensive materials at this level," according to the NSF review summary. The program limited its review to curricula that are comprehensive, that equal a year or more of course material (not a single unit), and that were produced during the last decade or are currently under development.

School officials looking to adopt new science programs, either those produced with NSF funding or other resources, can use the same evaluation criteria as the NSF program, says Janice Earle, program director for the Division of Elementary, Secondary, and Informal Science Education at NSF, and know "they are selecting materials that are definitely based on high standards." NSF's content standards for the middle grades cover the physical, life, and earth/space sciences. In addition, the NSF standards for all K-12 science programs include science and technology, science in personal and social perspectives (e.g., personal health or environmental science), the history and nature of science, and unifying concepts (e.g., form and function or evolution and equilibrium).

The criteria used to evaluate the materials go beyond content issues: They lead toward the final question in any review of content materials: "How good are the materials at pushing teachers to teach differently?" For example, the criteria emphasize concepts such as "inquiry-based" and "active" learning, asking such questions as, "Do the instructional materials provide students the opportunity to make conjectures, gather evidence, and develop arguments to support, reject, and revise their explanations for natural phenomena?"

The criteria also evaluate the curriculum's assessment components. According to the NSF framework, these components should focus on the curriculum's important content and skills, include multiple forms of assessment, and be embedded in the projects.

The more than 40 specific criteria conclude with questions about the overall quality, value, and contribution of the materials to middle-grades science. Evaluators should be able to tell, according to the NSF framework, if the materials turn students on to science, make students think, are of high content quality, use quality classroom assessments, and persuade teachers to improve their instruction. The NSF program, in fact, found some shortcomings in all of the curriculum projects. Most materials, according to the program's report, do not explicitly address strategies for improving the performance of a diverse set of students. Furthermore, most do not develop connections between science and math. The weakest area was the lack of focus on the history and nature of science.

Of the 19 NSF-funded middle-grades projects reviewed under the criteria, the following 13 had panel ratings of 3 or higher on a 1-5-point scale:

Comprehensive grades 6-10

PRIME Science, developed at the University of California/Berkeley; Kendall/Hunt Publishing Co., Dubuque, IA.

Comprehensive grades 6-8

Science 2000, Decision Development Corp., San Ramon, CA.

Middle School Science and Technology: Investigating Human Dimensions, developed by the Biological Sciences Curriculum Study; Kendall/Hunt Publishing Co., Dubuque, IA.

Comprehensive grades K-6

Full Option Science System, developed by Lawrence Hall of Science; EBEC, Chicago, IL.

Science and Technology for Children, developed by the National Academy of Sciences; Carolina Biological Supply Co., Burlington, NC.

Insights: A Hands-on Inquiry Science Curriculum, developed by the Educational Development Center; Optical Data Corporation, Warren, NJ.

Science for Life and Living, developed by the Biological Sciences Curriculum Study; Kendall/Hunt Publishing Co., Dubuque, IA.

Integrated Comprehensive grades 7-8

Integrated Mathematics, Science, and Technology, developed by Illinois State University; Glen Co. Macmillan, Peoria, IL.

Single-Year Comprehensive

Event-Based Science: Earth Science, developed by the Montgomery County (MD) Public Schools; Addison-Wesley Publishing Co., Innovative Learning Publications, Reading, MA.

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IMPROVING LIFE CHANCES

Urban Middle-Grades Reform: Foundations Keep Trying

BY ANNE C. LEWIS

Educators in urban middle schools may have the last chance to keep poor minority students in the education system. Studies indicate that dropout rates climb steeply among this group once they leave middle school. Evidence also suggests that if young adolescents are not prepared early for multiple academic options in high school, such as a college prep track, there is little hope they can catch up after the middle grades. Focusing on this age group in inner-city schools, the Edna McConnell Clark Foundation of New York City has just completed a five-year investment in middle school reform in five cities and has started a new round of grants, again in five cities.

The Clark Foundation is among several major foundations committed to improving the life chances of middle-grade adolescents. *Turning Points*, a 1989 report from the Carnegie Corporation, summarized much of the research about the development of this age group and set out the rationale for successful middle-grades curriculum and student support. The California State Department of Education's 1987 report, *Caught in the Middle*, led to the establishment of regional networks for middle schools that were funded by various foundations. The networks provided professional development, especially for principals, and encouraged the sharing of best practice within the regions. New Futures, a $50 million investment made by the Annie E. Casey Foundation in five cities over five years, focused initially on reaching students in the middle grades. A major project of the Lilly Endowment, Inc., supported middle-grades reform in Indiana, and the Pew Charitable Trusts has done similar work with middle schools in Philadelphia.

The Clark Foundation, however, has focused specifically on urban youngsters. It began working with school districts in Baltimore, Milwaukee, Oakland, San Diego, and Louisville in 1989, forming a network of 12 middle schools (two each in three cities, three each in two cities) that were to become beacons for systemic middle-grades reform in the districts. The districts promised to provide high content, high expectations, and high support for their middle-grades students, the goal being that these students leave the middle grades "on time" and prepared for options in high school that included college preparatory courses. The task seemed simple, straightforward, and came with few strings attached—and with an overall investment of about $10 million.

A Tough Assignment

At the end of the five years, however, narrative reports of the efforts revealed this to be a tough assignment for the districts, too tough for three of them. Baltimore, Milwaukee, and Oakland showed few positive results. Some schools even had some backsliding in student indicators, such as achievement and attendance. San Diego and Louisville managed to show positive results, although not what the Clark Foundation had initially envisioned. These districts had examples of higher student achievement, greater support for students, and more cohesive work among school staffs. They also were spreading reform to other middle schools. Both districts, however, also benefited from being part of statewide reform efforts.

Over the five years, the foundation funded several types of evaluation, both quantitative and qualitative. Three

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narrative reports examined the districts' efforts a year after beginning, three years into the project, and at the end of the project. These reports documented progress that began as attempts to do a lot of things without any direction. Gradually, the more successful schools began to focus on matching their goals to the Clark initiatives, and the more successful districts began to develop systemic reforms that affected all middle grades. The unsuccessful schools continued to think of change as something that happens through a program or short-term intervention, not as a process that requires constant evaluation.

The successful middle schools provided students with both nurture and academic rigor.

The studies also revealed a paucity of support for principals. Except for "housekeeping" kinds of meetings, few of the districts gave principals development opportunities to learn how to nurture change in their schools. The principals in the Clark network clung to the support of their other colleagues participating in the initiative, but that group kept changing. At the end of the five years, only one principal remained from before the project began, and she was reassigned the year it ended. All but two schools had at least two principals in five years, most had three, and one had four.

The successful middle schools in the Clark network provided students with both nurture and academic rigor, and were more student-centered than the unsuccessful schools, especially in academic areas. Such student-centered initiatives as collaborative learning, student-led projects, and student community service were designed to fit into the schools' academic goals.

Lack of Stability

Middle school reform in the Clark districts lacked stability in two major areas. One was assessment policy. Standardized test results were not considered to reflect the types of curriculum and instructional changes taking place, but the districts had no viable alternatives in place (except for the Kentucky assessments in Louisville). The foundation provided consultants to help the schools learn how to use assessment data for program improvement as a way of introducing them to data-based decisionmaking within the schools. For example, teachers designed surveys and conducted observations of certain interventions they were using, such as The Algebra Project or Writing to Learn.

Middle school reform also lacked stability in the relationship between the district and the teachers' unions. The unions' attitudes toward reforms often depended on the unique circumstances in each district that affected "working to the rule," but they also reflected the same ambivalence shown by national union leaders as they tried to figure out how to maintain traditional union protections under site-based decisionmaking. Principals who were reform-minded wanted flexibility in building their faculty, but were often thwarted by union rules regarding seniority.

Consistency of Vision

The final report on the Clark initiative, *Believing in Ourselves*, acknowledges that the problem of instability in urban districts will not be solved any time soon, and that changes in leadership—at school and district levels—will continue (all of the districts changed superintendents, and one district had three in five years). Where the Clark districts were able to overcome such instability, it was because they provided their urban students with a "consistency of vision and purpose based on high achievement of all students," according to the report.

Believing in Ourselves, which focuses as much on the districts' ability to change as on middle school reforms themselves, concludes that change at the bottom cannot happen without pressure from the top, either from the state (as in Kentucky) or the district (as in San Diego). It also warns foundations that there are limits to what they can do, especially with seriously troubled schools. The long abdication of responsibility by central offices for changes in such schools cannot be overcome by interventions from foundations. Advising foundations to be hard-nosed with districts about taking responsibility for failing schools, the report states: "If the district leadership is not focused on student success and cannot demonstrate that it understands and can act on systemic reform, its promises and plans ought to be seriously questioned."

Despite mixed results, the Clark Foundation is funding a second round of five-year reform efforts, this time with an emphasis on standards-based reforms, with specific academic goals for students, and with district commitments to include all middle grades in the efforts. San Diego and Louisville remain in the project; Minneapolis, Corpus Christi, and Long Beach have been added. Chattanooga also may become part of the new network.

Other foundations are not giving up on young urban teenagers either. The Carnegie Corporation is continuing its investments in middle-grades reform, focusing on state policies that foster change in local districts and schools. And the Casey Foundation has a new round of grants to encourage collaborative policymaking to improve the futures of young adolescents.

"Urban middle school reform is not just hard," says M. Hayes Mizell, director of the Program for Student Achievement at the Clark Foundation. "It is damn hard." But the fact that his program at the foundation, as well as others, are willing to continue helping urban districts keep at it reflects experience as much as hope for the students and teachers in these schools. "We have greater clarity and confidence because of what we have learned," he noted in an epilogue to the final narrative report. Those lessons support the belief that if some teachers and middle-grades schools can become better places for learning, more ought to be able to do it.

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LEGISLATION UPDATE

Goals 2000: Pork or Progress?

Despite being watered down by a hostile Congress, Goals 2000 may be supporting some important reform efforts

By Anne C. Lewis

Two years ago, Goals 2000 legislation enjoyed special status as the linchpin of the Clinton administration's education policy plan, the framework to which other legislation was added later—the reauthorization of the Elementary and Secondary Education Act, especially Title I, and the School-to-Work Opportunities Act: Goals 2000 was meant to focus all efforts on higher student standards and better assessments. With that goal and few regulations, it appeared to be the perfect policy strategy.

In this election year, Goals 2000 is bruised, stripped, and maligned at every opportunity by conservatives, especially Republicans in Congress and some Republican governors, even though every change they wanted in the legislation has been made. Furthermore, the U.S. Department of Education has approved every state education plan with virtually no changes, at least until Virginia stretched the patience of DOE officials too far by wanting the money, but with no accountability. The legislative changes tossed out provisions that liberal Democrats had fought to include, such as opportunity-to-learn standards like adequate resources and qualified teachers. These finally were included, although "voluntary" appeared on almost every line in the legislation. Another now-excised provision established a national council that was to suggest criteria for standards and assessments, again on a voluntary basis (this is being resurrected by the National Governors' Association as a "non-federal" entity). Now, Goals 2000 even promises to refrain from what it could not have done anyway, such as require a school/state to adopt "outcomes-based education" or set up school-based health clinics. Its only broad mandate is requiring states to have plans for improving student achievement and creating new assessments.

Despite bending so far that it is in danger of doing a back flip, Goals 2000 still doesn't satisfy its critics. "People are working overtime to make it controversial," laments Michael Cohen, former senior advisor to U.S. Secretary of Education Richard Riley, now education advisor in the White House and an architect of Goals 2000. Cohen doesn't believe that the controversies are over the wording in the legislation, but that they reflect a deeper ideological debate. Conservative Republicans agree, according to Vic Klatt, education policy coordinator for the House Committee on Economic and Educational Opportunities. Even though the Department of Education has done its best to implement Goals 2000 without regulation, says Klatt, "the majority of Republicans in the House are very skeptical of it. It is not so much the language as it is their concept that it promotes an overly intrusive federal role."

> ***Goals 2000 seems to be pointing public education generally toward standards-based reforms.***

At the Education Summit held in Armonk, New York, in March 1996, Republican governors repeatedly attacked the already weakened legislation. They were not pleased when President Clinton reminded them that Goals 2000 grew out of the governors' decisions at the first Summit, convened by President Bush in 1989. "We're only doing what you asked us to do," Clinton said. Clinton has reason to be defensive about Goals 2000; he designed the national goals effort himself while he was chair of the National Governors' Association.

Current Trends

Beyond the controversy in Washington and in some state capitals, what is actually happening with Goals 2000? Are state and local officials being forced to bend to federal desires, as Goals 2000 critics contend? Or is it so loosely organized that it is being used to support the status quo, rather than to move states and school districts toward higher standards and new assessments? Is it more like traditional pork-barrel legislation, such as impact aid, which can be spent on nearly anything with little accountability?

In the first two years of Goals 2000, almost $450 million have been distributed to the states. In the planning year (1994 for most states), 60 percent of the funds passed through to local districts. Last year local districts received 90 percent, as required by the legislation. Virginia is the only state not participating; three other states (Oklahoma, New Hampshire, and Montana) are not participating at the state level, but are allowing districts to apply directly for Goals 2000 funds. In many ways, Goals 2000 extends reform efforts already underway in some states. Vermont, for example, submitted as its state plan essentially the same goals presented in its Green Mountain Challenge. Oregon's reform legislation, Education for the 21st Century, became that state's plan for Goals 2000. Several states, including Massachusetts, Minnesota, Michigan, and Arizona, directed their Goals 2000 monies to support their charter school initiatives.

While Goals 2000 may be short on regulations, it is long on policy implications because of its focus on standards and assessments. Thus, it is encouraging states and districts to look seriously at what is expected of students in their states and how well teachers are prepared. Despite its loose organization, Goals 2000 seems to be pointing public education generally toward standards-based reforms. In a 1996 annual report to Congress, the U.S. Department of Education discussed some trends related to Goals 2000, and other studies are following the effect of the legislation. These indicate:

States are working on standards. Depending on the policy environment of the state, they are either developing state-directed standards or offering model standards that local districts and schools can use to compare with their own. Some are using Goals 2000 money to revise what they already had done. Texas, for example, had a long list of "essential knowledge and skills" for students. It is now bringing together teachers, parents, curriculum experts, and others from throughout the state to work on making the standards more rigorous. This process of broad review and development of standards is another offshoot of Goals 2000. Although this year's amendments dropped the requirement that state and local planning panels ensure that certain groups are represented, such as parents and businesspeople as well as educators, these groups are being included in the work of setting higher standards through committees and public meetings. Colorado, for example, held 12 public sessions throughout the state to get comments on its proposed state standards for students.

There is a remarkable consensus about what needs to be done.

Designers of state and local plans are well aware of the need to help teachers. Because the Goals 2000 money must focus on improving student achievement, it follows that professional development is a major concern. Although activities have just begun and only sample survey data are available, apparently professional development is getting the largest share of planning and funding. The nature of that development is also changing, moving away from the one-shot seminar with an expert who isn't around for any follow-through to long-term professional development experiences for teachers.

Technology use is getting a big boost from Goals 2000. Not only did each state receive a $75,000 supplementary grant for technology planning, but much of the professional development seems to be directed at going beyond just knowing how to operate computers and toward encouraging teachers to integrate technology into instruction.

Higher education is becoming more closely involved with K-12 education. Some districts have formed consortia with higher education institutions as partners. Often the campuses tailor professional development to what the teachers want, or they serve as the basis for regional networks. Some state plans include teacher education reform as part of the Goals 2000 effort.

Progress toward the assessment component of Goals 2000, however, is lagging. Goals 2000 proponents envisioned that the energy going into adopting higher content standards would be matched by equal efforts to design new assessment systems that measure what students are learning under the higher content standards. Even though 43 states have some kind of statewide assessment program, most of these do not reflect more rigorous standards. Furthermore, creating new assessment systems is expensive, and most of the Goals 2000 money is now passing through to local districts, which can't afford to fund new assessment systems on their own.

The Department of Education's solution has been to use federal discretionary Goals 2000 money for assessment development grants to nine individual states, as well as to a consortium of 22 states sponsored by the Council of Chief State School Officers. The specific solutions some of these grants are focused on, such as designing testing programs for limited-English-proficient students, are expected to be shared among the states.

"If you can get past the shouting," says Cohen, "there is a remarkable consensus around the country about what needs to be done." If there is such agreement and the Department of Education is so flexible about what can be done under Goals 2000, why have it at all? asks Sheila Burke of the Center for Education Reform, a conservative think tank in Washington, DC. Her concern—and that of conservative critics—is that no matter how far the assurances go on paper, "there often is a disparity between that and what really happens." A majority in the House shares this opinion, it seems, because it keeps defunding Goals 2000 (the Republican Party platform calls for its elimination). But the Senate is more supportive, and funding for Goals 2000 remains in the fiscal 1997 appropriations—at $491 million.

Even if Goals 2000 eventually fades from the scene, however, it probably has made some important contributions. Unlike many other federal programs, which are often viewed by local and state educators as short lived and, therefore, mostly helpful for purchasing equipment or for short-term training, the standards/assessment effort is here to stay. Too many people are involved in its various efforts and too much already has changed to say that Goals 2000 has failed. It may be too early, however, to say whether it has succeeded.

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TIME AND LEARNING

Just Like Starting Over: The Promises and Pitfalls of Block Scheduling

The first semester of managing 90-minute class periods is like being a student teacher again, but many believe the payoff is worth it

BY MICHAEL SADOWSKI

Sara, an 11th-grader at Middleburg High School, couldn't believe the choice she was faced with for her fourth block of the day: either keyboarding, which she had already taken twice, or agriculture, in which she had utterly no interest. Nothing else was available. Middleburg High had just changed to a four-block semester schedule, which the principal claimed would allow students to take a wider variety of classes, study subjects in greater depth, have more one-on-one interaction with teachers, and even graduate early. But Sara was not the only student to find that the new schedule created unexpected problems. Some had to fill in three of their four blocks with courses they hadn't requested. One was so disgusted by the lack of choices that she opted for a daily block of in-school suspension over a course she didn't want or need.

Once the school year started, the 85-minute classes Sara and her schoolmates attended were, at best, a mixed bag. While some teachers were using the lengthened class time to try a variety of hands-on teaching techniques like cooperative learning, peer editing, and group projects, others were still lecturing in the same way they had before, only for twice as long. Some teachers didn't know what to do with the extra time, so they just let students read or do their homework in class.

The Block Is Hot

These events took place at a Midwestern high school (Middleburg is not its real name) in its first year of block scheduling—an increasingly popular innovation whereby courses that have traditionally been taught in 45-minute daily classes over an entire school year are now taught in "blocks" of approximately 90 minutes, either daily for one semester or on alternate days throughout the year.

"We rushed into this," says the president of the local teachers' association. "The first I'd heard of it was in February, and the decision was made by the school board in May. Lots of promises were made that couldn't be kept."

Students were promised less stress, more active learning, better access to teachers, and fewer schedule conflicts, she says. Parents were promised higher test scores. Taxpayers were promised that no increase in teaching staff would be required. But all of these promises were made before administrators took a realistic look at what they could offer and what they needed to do to make the new schedule work in their school.

Teachers were promised smaller classes, but sections of many core courses swelled to 40 students because of scheduling problems. "If we'd had an extra year to study this, try schedules, and provide more in-service for teachers, this would be easier," the union president says. "I really think a lot could have been solved by not rushing into the program. It's hard to solve these problems midstream."

Not every school that has switched to block scheduling has had as rough a time as Middleburg High, but researchers report that many of the diffi-

INSIDE

Answers to Common Questions About Block Scheduling
What Kids' Drawings Say About Schools
What's So Bad About the Lecture?

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culties are virtually inevitable. "For teachers, the first semester is like student teaching all over again," says Robert Lynn Canady of the University of Virginia. "In fact, the whole first year is not all that good." Canady has been a block scheduling consultant to schools in 34 states. He notes that while staff development in cooperative learning and other strategies is essential to help teachers plan longer, more student-centered lessons, nothing can fully prepare them for the challenge of running 90- or 100-minute classes effectively day after day.

"I went through a week's worth of lesson plans in my first session," says Roger Schoenstein, foreign languages chair at Wasson High School in Colorado Springs, which went to a semester block schedule in 1990. "Another teacher found he'd seriously overestimated what could be accomplished in the longer class periods. The beginning of the second semester was like September all over again, only the staff was already tired. We hadn't just returned from three months off, yet it felt as though we were starting a completely new school year."

What's the Payoff?

The good news is that, after the first year or two, about 80 percent of students and teachers say they prefer the block schedule and would not want to go back to shorter periods, according to Canady. Schoenstein, for example, is not only a block scheduling convert now but one of its leading advocates. He is the primary author of Wasson High School's World Wide Web site, one of the most widely read online resources on block scheduling. "I can't imagine having to encounter 175 or 180 kids a day and teaching five or six classes again," he says. "I did it for 23 years, and it felt okay at the time—but having been on this schedule, I'd never go back."

Even if they cover less material, many teachers on block schedules believe their students understand concepts better because the longer class period gives them more time for cooperative activities, group work, and building on what they are learning in logical, sequential steps. "I believe this system, better than any other, allows us to teach students *how* to learn, not just facts," says Marsha Zierk, who teaches English and physical education at Central High School in Burlington, IL, now in its sixth year of block scheduling. "It also allows us to help them learn to work collaboratively. This is so important in the real world today. Corporations don't just want intelligent people; they want people who can be part of a team and know how to work collaboratively to solve problems."

Systematic research on the effectiveness of block scheduling is scarce. Many studies look at only a single school and rely on self-reporting of students' and teachers' attitudes, which can be unreliable. But most of these studies appear to confirm that the investment of time eventually pays off.

"You need to look at models, but don't just adopt one. Adapt it to the needs of your school."

In a 1995 University of Kentucky study following three semesters of block scheduling at Governor Thomas Johnson High School in Frederick, MD, two-thirds of the students said they understood lessons better and 69 percent preferred the four blocks to the seven-period day. Wasson High's statistics after four years "on the block" showed a 27-percent rise in the number of students on the honor roll (those with a G.P.A. of 3.2 or better), a 17-percent decrease in the failure rate, better attendance, and a decrease in average class size from 24.5 to 21.6 students. A number of national studies on the effectiveness of block scheduling are currently underway at several universities.

Regardless of whether or not one agrees with the philosophy behind block scheduling or believes that the benefits discovered in these studies are real, its emergence as a trend is undeniable. In a national study on high school restructuring, Gordon Cawelti of the Educational Research Service found that, as of the spring of 1993, 23 percent of high schools were either totally or partially running on block schedules, and another 15 percent planned to implement a block schedule the following year. Most experts agree that those numbers have risen significantly since then, especially in some states. About half of the high schools in North Carolina are currently on block schedules, and Virginia and Minnesota are not far behind.

Laying the Groundwork

Also undeniable are the pitfalls. While some of the mishaps at Middleburg High were unforeseeable, many probably could have been avoided. Dennis-Yarmouth Regional High School in Massachusetts changed to a block schedule in the fall of 1993, but began laying the groundwork years before. "We spent a lot of time thinking about it before we had to live with it," says Dennis-Yarmouth Superintendent Michael McCaffrey.

Dennis-Yarmouth assistant principal Thomas Lemond began devoting all of his time to curriculum and instruction in 1988. Changing the schedule was part of an overall plan to raise academic standards in the face of sagging achievement. Lemond conducted three years of research and interviewed administrators and teachers at more than 100 schools before settling on a seven-period schedule in which students have three double-period classes (usually core courses like math and English) and one single-period class (electives, physical education, health, or study hall) each day. The program was designed to dovetail with an existing freshman team structure and enables freshmen to take the single-period electives along with upperclassmen. It also enabled the school to require more core courses for graduation.

Lemond believes Dennis-Yarmouth's new schedule worked (irreconcilable conflicts in scheduling core courses actually went down, he says) because it was tailored to the school's needs. "You need to look at models," he advises, "but don't just adopt one. Adapt it to the needs of your school."

Dennis-Yarmouth also began staff de-

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velopment early. Lemond believes the most effective programs were those that gave teachers practical tools for incorporating cooperative learning and group work strategies into their teaching and those that emphasized rethinking not just the use of time but also the curriculum itself. Beginning in the fall of 1992, administrators urged all department heads to brainstorm with their faculties about teaching and learning goals, as well as about instructional strategies that could be used in 90- to 100-minute periods.

"This forced us to take a look at not just what we want to teach, but what is really important," says Lemond. Less successful, he adds, were theory-based staff development programs in which an expert came in to talk to staff about heterogeneous grouping, the inclusion of special-needs students, classroom management, and other issues.

Even with all this advance planning, the transition to block scheduling at Dennis-Yarmouth was not without problems. Some students were scheduled to take a foreign language in the fall semester of year one and the spring semester of year two; they complained that this gap was too long. Some teachers had trouble pacing their courses the first time through. "We had a U.S. history teacher who wasn't used to having to get to 1900 by January," says Lemond. "In November, he was still unloading the Pilgrims."

"Block scheduling is a tool," says Mary Ellen Ackerman, chair of the English department at Dennis-Yarmouth. "As such, it is only as good as the craftsman who holds it. Of course, you start out pretty clumsy."

Wherever block scheduling is proposed as an alternative to the old single-period schedule, concerned parents, teachers, and students ask many of the same questions. Their concerns are often legitimate, and these questions can derail administrators' plans if they are not prepared with answers. Almost all administrators in block-scheduled schools say staff and community support are essential to the success of any major structural change.

"Don't force it," warns Canady. "Give teachers the opportunity to learn about it, study it, talk to other teachers who are doing it—and don't do it until they believe in it. Parents will buy pretty well what teachers truly believe in."

For Further Information

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Michael Sadowski teaches English and drama at Dennis-Yarmouth Regional High School in Massachusetts.

Resources for Exploring the Block Schedule

Relatively little research has been published on block scheduling, but the number of books, articles, and Internet sites about it is growing. Here is a sampling of resources in different media that offer varying perspectives on block scheduling.

"Block Scheduling at Wasson High School" (http://www.classroom.net/classweb/myhome.html) At least a dozen schools with block schedules now have Internet web sites. This one, probably the most extensive and most widely read, includes a description of the schedule and the district's transition process, sample lesson plans, statistics on various measures of the schedule's success, and a list of other resources. Other sites include Bethel (VA) High School (http://www.bethel.hampton.k12.va.us/block.html) and Pelham (NH) High School (http:// www.seresc.k12.nh.us/%7 ekroderic/).

"The Block Scheduling House of Problems" (http://www.netaxs.com/~vito/) Created by teachers and parents of the Wissahickon (PA) School District, which will begin a pilot program of block scheduling in the fall of 1997, this web site presents arguments against the change. It includes information on research into memory and attention span, arguments against the claims of better grades made in block-scheduled schools, and data on the funds spent on professional development and consultants in the Wissahickon district and other districts in preparation for a move to a block schedule.

Robert Lynn Canady and Michael D. Rettig. *Block Scheduling: A Catalyst for Change in High Schools.* Princeton, NJ: Eye on Education, 1995. Canady, probably the country's best-known consultant on the subject, and University of Virginia colleague Rettig argue for block scheduling first by outlining the problems of the single-period schedule. They describe several different models of block schedules, including alternate day and four-by-four (semester) plans, and a trimester plan. In a follow-up book edited by Canady and Rettig, *Teaching in the Block* (Eye on Education, 1996), teachers from a variety of disciplines offer practical strategies and techniques for using extended periods effectively.

Joseph M. Carroll. *The Copernican Plan: Restructuring the American High School.* Andover, MA: Regional Laboratory for Educational Improvement of the Northeast and Islands, 1989. Carroll's Copernican Plan is based on the premise that individualization is the key to student learning. In a second book, *The Copernican Plan Evaluated: The Evolution of a Revolution* (Regional Laboratory, 1994), Carroll cites examples of block schedules at 11 schools to support his case that students learn best when both they and their teachers are handling as few classes at a time as possible.

***Educational Leadership* 53, no. 3 (November 1995).** This theme issue includes an article by Canady and Rettig, "Departing from Tradition: Two Schools' Stories," underscoring the need for teacher enthusiasm if the schedule is going to work, as well as "Ten Guidelines for Implementing Block Scheduling."

***The Executive Educator* 17, no. 8 (August 1995).** Roger Schoenstein of Wasson High School describes his conversion from skeptic to advocate in "The New School on the Block." Rebecca Jones offers suggestions for avoiding "scheduling nightmares" in "Wake Up!"

***Horace* 12, no. 2 (November 1995).** The Coalition of Essential Schools devotes this issue of its newsletter to a discussion of how alternative schedules support teaching and learning philosophies in Coalition schools. In "Using Time Well: Schedules in Essential Schools," editor Kathleen Cushman presents sample schedules and their relationship to such principles as "personalization" and the "student as worker, teacher as coach paradigm."

***NASSP Bulletin* 79, no. 571 (May 1995).** Articles in this special issue include a description of the "hybrid" schedule at Eleanor Roosevelt High School in Greenbelt, MD, which provides flexibility within a basic block format for longer or shorter periods, and "What Can We Expect to See in the Next Generation of Block Scheduling?"

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Block Scheduling: Questions and Answers

Following are some of the most common questions about block scheduling, along with responses based on the comments of researchers, teachers, and administrators:

Won't students forget too much material, especially if they have a full-year break from a particular subject?

Full-year breaks do present a challenge in the standard semester block schedule, in which major courses such as science, math, and foreign languages that were once taught over a school year are condensed into one-semester classes of about 90 minutes per day. As happened at Dennis-Yarmouth Regional High School in Massachusetts, a student might be scheduled for French in the fall semester one year and the spring semester the following year—a full-year break. Foreign language and math teachers are often among the most skeptical about the wisdom of such a schedule, because of the sequential nature of their subjects.

"One major problem we have is that people don't understand about forgetting," answers Joseph M. Carroll, author of *The Copernican Plan*, which proposes a program and a rationale for restructuring schools around longer, more intensive classes for fewer days (see "Breaking the Tyranny of the Schedule," *HEL*, March/April 1992). In his book, Carroll argues that students probably do most of their forgetting of a course's material during the first three months or so after it ends, that students are more likely to forget material they've learned by rote than knowledge gained in more engaging activities, and that "concentration of attention" and immediate feedback—both facilitated by longer class periods—reinforce memory.

Still, some schools have come up with creative solutions to the "forgetting" problem. The foreign language department at Wasson High in Colorado Springs, after finding that the biggest problems occurred between the first and second years of learning a language, scheduled all first-year courses for the spring term and all second-year courses for the fall.

Many schools address the problem by having an alternate-day block schedule (commonly called an "A/B schedule") instead of a semester-based one. Students still take most courses throughout the year, but in longer blocks on alternating days. While this kind of schedule eliminates the problem of a long break between courses in a sequence, critics say it lacks the "personalization" of the semester schedule, where teachers have about half as many students at any given time.

Can high school students really sit still for 90 minutes?

While some might argue that the fast pace of an eight- or nine-period day with a change every 45 minutes is necessary for teenagers with short attention spans, Carroll counters that the traditional schedule actually *makes* students less focused. Longer periods, on the other hand, have a "dejuvenilizing" effect on young people, he says. They give students more time to take on adult responsibilities in classes (rather than being passive receivers of information) and provide more opportunities for meaningful interaction with teachers.

What about when a student is absent? Won't they miss two days' worth of work?

Yes and no. Students will miss twice as much time in a given subject if they are absent, but they will also miss only half as many classes and have half as many teachers to report to for makeup work as they do under traditional schedules. Still, there are steps schools can take to keep students from missing too many double periods in a given course. Some schools on block schedules have set policies to limit the number of absences a student is allowed because of sports or other school-related activities.

Will students who fall behind in a semester class have any real chance to catch up?

Teachers who work in block schedules agree that students who fall behind in a semester course can face a doubly difficult time catching up before the class is over. Wasson High has instituted several automated systems for contacting parents or guardians if students are absent frequently or are in danger of failing. (Reports on students with D or F averages are sent weekly.) Teachers also are asked to keep parents and guardians well informed of students' progress—a task that is made easier by smaller student loads.

Won't students who take Advanced Placement courses in the fall do poorly on the tests, which are given in the spring?

The timing of A.P. tests in the spring is another argument often used against a semester block schedule, since students who finish a course in January must wait four months to take the test. Moreover, the parents of students who take A.P.s tend to be among the most vocal and powerful people in town.

Schools have developed several strategies for handling this issue. At Dennis-Yarmouth, A.P. courses meet all year (in a double-period block one semester and a single period the second semester), keeping students' skills fresh for the test in May. Some schools offer review sessions in the spring, and schools on trimesters often run A.P. classes during the first two trimesters, leaving very little "down time" before the test.

"We have a big bureaucracy in this country built up around the single-period schedule," says Canady. But this lock may be ending. In response to the popularity of block scheduling, the Educational Testing Service is considering offering the A.P. tests twice a year beginning in 1998.

Isn't block scheduling bad for special-needs students, who may not be able to sustain the attention needed for extended periods?

On the contrary, says Marsha Zierk of Central High School in Burlington, IL, "special-needs students do extremely well in this system. They have the extra time they need to understand. And, since most material is taught with a mixture of techniques (lecture, small group cooperation, project work), it is more likely that their personal learning styles will be met."

Will we have to change the curriculum?

Possibly. Lemond says schools have to be willing to revisit curriculum questions if block scheduling is going to work. Schools that offer a lot of specialized, single-section elective courses may need to give up the model of the "shopping mall high school," or teachers could end up with too many different preparations. He cites the example of a teacher in a neighboring school district who taught three different 90-minute courses a day under a block schedule because the curriculum was too specialized.

MICHAEL SADOWSKI

ASSESSMENT AND EVALUATION

Getting Kids into the Picture: Student Drawings Help Teachers See Themselves More Clearly

A school evaluation project finds that surveys of students' attitudes are helpful, but it's the kids' drawings that really hit home

BY ROBERTA TOVEY

Catch a 6th-grader making a drawing of his teacher in class and you would most likely take it away and tell him he'd better shape up and pay attention to his work. Right? Not at the Scott Middle School in Hammond, IN. As part of a project to assess the school's environment, Scott students are asked to draw such pictures—with results that are surprisingly enlightening.

"We saw a lot of drawings of teachers at their desks or with pointers, standing at the blackboard," says Bill Paskis, a social studies teacher at Scott Middle School who participated in the project. Many of the drawings had no kids in them at all, he says, "just desks in straight rows and a clock on the wall."

For the teachers at Scott, who are committed to doing more group work and being more available to their students, these pictures were disappointing. "Teachers were taken aback to see the traditional guru at the blackboard," says Principal Frank Lentvorsky. "We realized that we revert back to traditional modes of teaching more than we thought we did."

Evoking Reflection

Using students' drawings as one component of school assessment emerged from a broader effort to help schools evaluate their reform initiatives. The strategy was developed by the Center for the Study of Testing, Evaluation, and Education Policy at Boston College, working with the Co-NECT (Cooperative Networked Education Community for Tomorrow) Schools, a reform group of which Scott Middle School is a member. Random samples of students fill out a "student reflection survey," part of a larger set of assessments in math, science, reading, and writing. The survey includes both multiple-choice and open-ended questions, and concludes with this instruction: "Think about the teachers and the kinds of things you do in your classroom. Draw a picture of one of your teachers working in his or her classroom." After the answers are coded, a researcher from the Center meets with small groups of teachers to go over the results and look at the drawings.

"What really caught our attention was the way teachers reacted to the drawings," says Walt Haney, senior research associate at the Center. When teachers looked at other items in the assessment, they focused on subject matter—math, science, reading. But when they looked at the drawings, says Haney, "discussion turned to the teachers themselves—not just what was being taught, but how." He believes that kids' drawings have great potential for "engaging teachers and evoking teacher reflection."

At the Dzantik'i Heeni Middle School in Juneau, AL, another Co-NECT member, the student drawings generated in the student reflection survey made teachers think about their teaching more critically, says Principal Charla Wright. "At first we got a lot of laughs," she reports. "But then teachers started asking questions like 'What percent of the time *do* I spend at the blackboard?'" Teachers noticed that students in one of the school's several "houses" drew pictures that were different from the others. "That generated a lot of discussion," says Wright.

"Pictures are a unique way of letting kids creatively express how they feel," says Paskis. "And the pictures hit home. Sometimes we assume that kids don't care about what goes on in class. But when we saw those drawings we realized that they do care and they do pick up on how they are being taught."

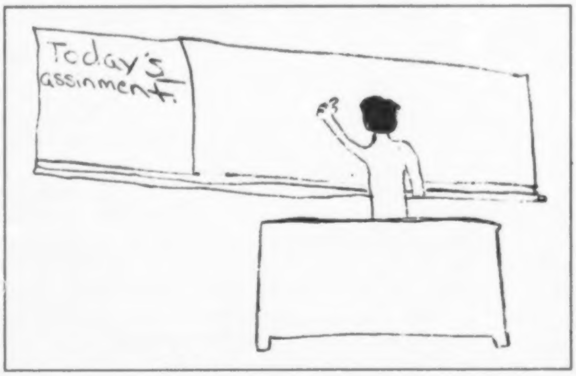
Powerful Landscapes

Psychologists have long recognized the value of children's drawings. We have all experienced how powerful and revealing such drawings can be. So it is surprising that educational research has not tapped into this rich lode. One reason may be that those who study children's drawings have focused on what the drawings reveal about the inner workings of the child's mind—his psychological rather than sociological landscape. But drawings also reflect the external environment.

Haney became interested in drawings as reflections of one's environment while working as a volunteer teacher in Southeast Asia. He interviewed scores of refugees to learn more about the bombing of northern Laos. A friend suggested that he ask his interviewees to draw pictures of what they had seen in order to identify the aircraft. Haney was greatly moved by the drawings, which were eventually published in a book, *Voices from the Plain of Jars*.

His interest in drawing as a form of school assessment comes also from his work on creating alternatives to standardized tests. "I've always been a fan of multiple methods of evaluation," he says. "This is a new window—we can see things through kids' drawings that we can't see anywhere else."

When he guides teachers through their students' drawings, Haney asks them to look for patterns and to think about why the patterns are there and what they might do differently to change them. He encourages them to choose just a few areas to focus on and to work on those for six months. Then a follow-up



student reflection survey is done. Over time, student drawings can be used "to document changes in the ecology of the classroom," he says.

Drawings from two follow-up student reflection surveys at Scott Middle School seemed to do just that. "We saw teachers represented more as facilitators, which was an area we had targeted," says Lentvorsky. "More drawings had teachers in groups, not isolated." Perhaps most important, there were more kids in the pictures.

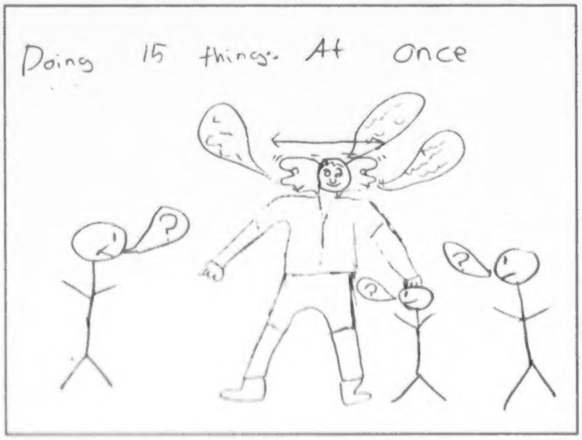
The follow-up drawings of other Co-NECT schools reveal similar patterns. There are more drawings of kids in groups, of desks set up in circles or clusters, and of teachers as coaches rather than deliverers of information. Computers also became a familiar element in the pictures. These patterns are consistent with the Co-NECT schools' emphasis on cooperative learning, redesigned classrooms, and technology.

> ***"Pictures are a unique way of letting kids creatively express how they feel."***

Though using student drawings began as a way to assess reform efforts, the pictures can be equally useful in analyzing the educational environment in more traditional settings. Haney recalls one particularly telling instance. A teacher who had "really lost his cool" in class one day appeared as an angry, shouting figure in several drawings. "The teacher was astounded that so many students depicted this incident," says Haney, "even though it had happened only once, several months before the drawings were done."

Can Drawings Be Trusted?

But can student drawings be trusted as accurate gauges of "classroom ecology"? Certainly it is easy to manipulate the outcomes of such an assessment. A teacher could influence students to take a certain approach to the assignment, either deliberately or inadvertently. Partly for this reason, Haney recommends that drawings be used only in internal evaluations. "I would not use these for state assessments," he says.



Students can also be influenced by their own preconceptions about school. During feedback sessions, teachers and administrators often ask, "Do these drawings show how we really behave or how the students *expect* us to behave?" Victor Battistich, an expert on student attitude assessment at the Developmental Studies Center in Oakland, CA, says that gauging the accuracy of kids' drawings could be tricky. "I would hesitate to infer too much from a drawing or to assume it was an accurate assessment of classroom environment," he says.

While one should be careful not to infer too much, Haney points out that "research says kids' drawings are affected by preconceptions but also by experience. In a lot of the feedback sessions, teachers often start by saying, 'This is a result of the child's preconceptions.' But then they see drawings that reflect real experiences unique to their school."

Moreover, recognizing students' preconceptions is itself useful. "Kids' preconceptions about our role can have a real effect on what happens in the classroom," says a teacher from the ALL School in Worcester, MA. "Maybe we need to talk about our role with the kids—about what we're trying to do. Otherwise they will only be confused when we try to change what we're doing in class."

"We and kids hang onto stereotypes," says Wright. "Recognizing this makes you ask, How do you help kids realize that something new is happening in the classroom?" Wright is one of several principals and teachers who say that it would be useful to ask students for drawings and then discuss the drawings in class. "The environment affects how kids learn, and kids bring their own context to learning," she says. "If a student pictures the teacher in front of the class lecturing, does that mean that he is waiting for someone to tell him what to do?"

Kids' drawings of teachers and classrooms can be more than indicators of classroom environment; they can be a way for kids to take an active part in their own learning, especially for children who are not big talkers. By asking such kids to express their feelings about their learning environment through pictures, we can give them a voice in how their classrooms are run. At Scott Middle School, which has been working toward full inclusion, using drawings has been "especially helpful in allowing us to learn the feelings of our learning disabled students," says Principal Lentvorsky. "Middle school kids in general have a difficult time communicating with adults," he adds. "We have a lot of kids doodling in class who don't talk much. The drawing lets us get some of the nonverbal communicators to give us their impressions."

Walt Haney reports that several middle schools not part of the Co-NECT project have expressed interest in the student reflection surveys and the drawings they elicit. Haney and his colleagues are working now to develop a manual for the student reflection survey, which would describe its basic concept and explain how schools can create new items, administer the survey, and analyze the results. They also plan to create a teacher training package, so schools can do their own coding and evaluation.

For Further Information

Co-NECT Schools, Bolt Beranek & Newman, 10 Moulton St., Cambridge, MA 02138; 617-873-3000.

Dzantik'i Heeni Middle School, 10014 Crazy Horse Dr., Juneau, AL 99801; 907-463-1899.

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Walt Haney, Center for the Study of Testing, Evaluation, and Educational Policy, Campion Hall 323, Boston College, Chestnut Hill, MA 02167; 617-552-4521.

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THEORY AND PRACTICE

What's So Bad About the Lecture?

Teachers say there's a place for lecturing—especially the interactive kind—but reformers don't always agree

BY LISA BIRK

The lecture has been getting an increasingly bad name over the past decade. John Goodlad's 1984 book, *A Place Called School*, accelerated the vilification of the lecture, says Robert Hampel of the University of Delaware. Goodlad's book reported that teachers talked—and students listened—70 percent of class time.

"Everyone's answer," says Hampel, "was to reduce the time of teacher-talk, but almost nobody's answer was organized and structured teacher-talk." This tendency of some reformers to throw the baby out with the bath water is a common complaint among teachers.

In fact, teachers say they are lecturing less than ever. Tom Taylor, who teaches history and economics in Terre Haute, IN, says, "I don't know anybody who simply lectures anymore. But I work with people in the education reform business. They think everybody lectures."

The case of the lecture provides an instructive example of the gap that can exist between theoreticians and practitioners. Although there is almost no systematic research on the lecture as a teaching method, many proponents of various school reform efforts are convinced that the lecture is an outmoded teaching tool, and that teachers spend far too much time lecturing. "When teachers do lecture," says Richard Clark, an Educational Reform Effort Consultant from the University of Washington, "most are informal and rambling. They're not good lecturers. And if they do ask questions, they just get students to recall."

What's Wrong with Lecturing?

The "lecture" is a slippery concept. Fifty years ago it meant teacher orates, students write—and it lasted 50 minutes. Some teachers were good at it. Most weren't. These days, lecture encompasses two sorts of presentations, the traditional lecture, as well as the "interactive" lecture, where the teacher still does most of the talking, but engages students with questioning and storytelling. An interactive lecture might last the whole period or just ten minutes, depending on the teacher's purpose and the students' needs.

Most educators and reformers concede that good teachers include interactive lecturing in their bag of tricks, primarily for introducing topics. (No one interviewed for this article endorsed the traditional lecture outside the college setting.) However, they fear that lots of teachers, good and bad, rely on both kinds of lecturing far too much—reducing student interest and learning. "There's a *small* place for lecturing—when students have explored their own ideas," says Eleanor Duckworth of Harvard's Graduate School of Education. "But the teacher tends to be the one whose ideas get the most air time, who says by far the most words."

> ***Most educators and reformers concede that good teachers include interactive lecturing in their bag of tricks.***

For many theoreticians, the problem with the lecture—even the interactive sort—is that it may leave out certain students. Howard Gardner of Harvard's Graduate School of Education points out that the lecture highlights linguistic intelligence. It is best suited, he believes, for students whose strength is linguistic intelligence or who can translate the words into their preferred form of intelligence. "The more the listener can convert the lecture into preferred modes of information, for example, spatial or musical," says Gardner, "the more effective the lecture is." Students who are less able to "convert the lecture" are less likely to benefit from this form of teaching.

Harvard's Catherine Snow worries that the "transmission model" that underlies the lecture is only temporarily effective. Students, she says, come to class with their own models of how the world works—which are often incorrect. A lecture overlays rather than replaces their models. Over time, after the test, it is their original understanding that will endure.

The Case for the Interactive Lecture

Even so, many reflective and successful teachers continue to use the lecture because it works for them. An interactive lecture, they contend, may be among the best vehicles for introducing a concept or presenting the big picture. A savvy teacher who knows her audience can connect student experience to abstract material. Most teachers who use the interactive lecture use it in small doses, but some teachers, particularly those teaching abstract subjects like higher math or physics, depend on the interactive lecture.

Frauke Palmer, an Ohio science teacher for 19 years, says she uses the interactive lecture about 50 percent of the time and swears by it. She claims her stories and questions guide students to an understanding of complex topics like the laws of physics, and prepare her students to understand subsequent lab experiments.

Palmer's lectures have all the hallmarks of a good talk. She's organized and uses examples drawn from student experience. To introduce the principle of momentum conservation, for example, she begins by asking her students to imagine they've just baked a pan of brownies and cut them in 16 pieces to cool. When you return, she continues, you discover one piece missing.

"Is it gone?" She asks. "Where is it?" Someone will volunteer that his little sister ate it. "What if everyone in the family denies eating it?" Maybe it was the dog, someone will suggest. "So it's not—poof!—gone?" Palmer asks. The students agree that the missing brownie is somewhere in some form.

Palmer then makes an analogy between the missing brownie and missing momentum: just because it's invisible, doesn't mean it's gone. She shows photos of colliding particles and asks, "What if you measured the momentum of the particles before the collision and after, and discovered missing momentum? Is it really gone?" With the example of the 16th brownie, students easily understand that momentum is conserved in one form or another.

Palmer's lectures do what Harvard psychologist Kurt Fischer says the best lectures do—they raise the level of the students' knowledge. For maximal learning, Palmer follows up her interactive lecture with labs on momentum so the students see the principle in action. It is this combination of conceptual framework with student practice that Fischer claims is one way to produce real gains in understanding.

Connecting with Students

Those gains are not limited to middle-class students in tough science classes. Bill Tomasco teaches English at Philadelphia's Furness High School to students who live in or nearly in poverty. He lectures about one-third of the time and is highly effective, says Furness Principal Joe Bergin.

Tomasco's lectures relate literature to his students' lives. Last year, two of his students were pregnant and one already had a child. He had the class read *Tess of the D'Ubervilles*. "What would you do if you were unmarried, raped, and became pregnant?" he asked his students. "What do you have today that she didn't have?" Often, students grow irritated with Tess. Some feel her life is too sad. But that irritation is a sign that they have become engaged with the story.

Good lecturers, like Palmer and Tomasco, motivate and inspire their students, says Fischer: "They provide models of how a physicist or an English teacher thinks," and their lectures support and extend students' understanding. "One of the problems with the way we talk about knowledge," Fischer continues, "is that we talk about having it or not, when in fact we have it in gradations. The lecturer produces a situation where the learner gets the best level of understanding." Later, as students work on their own, whether in labs or at home, their understanding slips. But with a combination of lectures and student work, gradually the students master concept and application.

Under Pressure

Still, the lecture is decidedly out of fashion. "Lecturing is a bad word these days," says science teacher Palmer. "Teachers are just not going to admit they do it." Every teacher interviewed for this article, though highly recommended by principals and colleagues as effective and popular instructors, talked about feeling pressure to give up the lecture. Tomasco referred to "system-wide initiatives." Taylor told of one reform effort that caused his principal to call teachers down to the office team by team. "We were told we were going to change the way we taught," says Taylor. "The lecture was destroying education, so change or get out." Despite the threat, Tomasco didn't stop lecturing. He worried, but he'd seen a lot of reforms come down the pike, he says. He knew what worked in his classroom, and he stuck with it.

What about other teachers who also use the interactive lecture effectively, but are less sure of themselves? "They probably just close the door," says Palmer. "Or maybe they call it something else. They say, 'We're working together now, and I'm not lecturing.' The students *are* working together, but the basis of the knowledge," says Palmer, "comes from the lecture."

Such secrecy may breed cynicism, perhaps even a reluctance to embrace new ideas, in even the most confident, competent teachers. "A few years ago," says history teacher Taylor, "phonics was bad. Now, phonics is back in. In the sixties, the New Math drove the school curriculum. Now, you don't even hear 'New Math.'"

Harvard's Claryce Evans sympathizes with Tomasco and teachers like him. "One of the flaws of many school reform efforts," she says, "is that the teachers who are doing a perfectly good job feel criticized, unappreciated, and pressured to change, and meanwhile down the hall, the clunk teacher who ought to be getting the message isn't."

Moreover, teachers are a lot closer to the consequences of their actions than reformers are. The proof of their pedagogy is in the quality of their students' work. "Professors are allowed to speculate without always having to face real-world consequences," says Harvard's Robert Traver. "I bet people got tenure for papers they published on New Math, even though after five years it didn't work. The consequences for proposing reforms are different from those for implementing reforms."

Good teachers struggle with how best to educate their students and the trade-offs between using one method or another. "Group learning does foster certain skills," says Palmer. "But what does group learning not teach? And are those skills important?"

Practitioners and theoreticians both raise good questions about pedagogy and outcomes. Perhaps what's needed is a common meeting place where those questions can be asked and, through discussion and practice, the gaps in experience and theory can be bridged. Evans and Traver believe the best environment for that dialogue may be a new type of institution, called the professional development school, where college professors teach children and schoolteachers teach undergraduates. In such schools, perhaps educators can throw out the bath water and save the baby.

For Further Information

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